

EXHIBIT 1

PART 1

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

ALI KARIMI, Individually and on behalf of all
others similarly situated,

Plaintiff,

v.

DEUTSCHE BANK AKTIENGESELLSCHAFT,
JOHN CRYAN, AND CHRISTIAN SEWING,

Defendants.

Case No. 22-cv-2854 (JSR)

EXPERT REPORT OF ZACHARY NYE, PH.D.

July 18, 2022

Table of Contents

I.	Background and Qualifications.....	1
II.	Scope of Engagement	1
III.	Bases for Opinions.....	2
IV.	Summary of Opinions.....	3
V.	Overview of Deutsche Bank’s Business Operations	3
VI.	The Market for Deutsche Bank Stock Was Efficient Throughout the Class Period.....	7
	<i>i. Application of the Cammer Factors Demonstrates That the Market for Deutsche Bank Stock Was Efficient During the Class Period</i>	<i>10</i>
	A. Cammer Factor 1: Weekly Trading Volume	10
	B. Cammer Factor 2: Number of Securities Analysts	11
	C. Cammer Factor 3: Number of Market Makers and the Potential for Arbitrage	14
	D. Cammer Factor 4: Eligibility to File SEC Form S-3	22
	E. Cammer Factor 5: Empirical Facts Showing a Cause-and-Effect Relationship Between Unexpected Corporate Events or Financial Releases and the Price Reaction of Deutsche Bank Stock.....	24
	F. Additional Factor 1: Market Capitalization	28
	G. Additional Factor 2: Bid/Ask Spread.....	29
	H. Additional Factor 3: Public Float.....	30
	<i>ii. Comparison of U.S. and German Markets for Deutsche Bank Stock</i>	<i>30</i>
VII.	Damages Can Be Measured on a Class-Wide Basis and in a Manner Consistent with Plaintiffs’ Theory of Liability.....	37
VIII.	Conclusion	40
	Appendix A: Description of Regression Analyses	42

I. Background and Qualifications

1. I am a financial economist and Vice President at Stanford Consulting Group, Inc. (“SCG”). Since 1981, SCG has provided economic research and expert testimony for business litigation, and regulatory and legislative proceedings. All SCG professionals hold masters or doctoral degrees in business, economics, finance or operations research, and certain senior consultants have testified as experts in these fields. I have an A.B. in Economics from Princeton University; an M.Sc. in Finance from the London Business School; and a Ph.D. in Finance from the Paul Merage School of Business at the University of California, Irvine. I have co-authored academic research published in peer-reviewed conference proceedings, as well as working papers with finance faculty at various universities. My research areas include the market efficiency of financial and derivative securities, volatility forecasting, risk management, financial econometrics, valuation and corporate finance. I have previously served as an expert witness in matters involving securities litigation, as well as business and intellectual property valuation. My curriculum vitae, which includes my academic research, publications in the past ten years, and prior expert testimony in the past four years, is attached hereto as Exhibit 1.

2. My current hourly rate is \$900. I have received assistance from individuals at SCG, who worked under my direction; their fees charged for this project are their standard hourly rates. Neither my compensation nor that of any individual at SCG is contingent on the outcome of this litigation.

II. Scope of Engagement

3. I have been retained by Counsel for Plaintiffs in this matter to opine as to whether the common stock of Deutsche Bank Aktiengesellschaft (“Deutsche Bank,” “Deutsche Bank AG” or the “Company”) traded in an efficient market during the period March 14, 2017 through September 18, 2020, inclusive (the “Class Period”). I also have been asked by Counsel to opine

on whether damages under §10(b) (“Section 10(b)”) of the Securities Exchange Act of 1934 (“Exchange Act”), and Rule 10b-5 promulgated thereunder by the SEC, can be calculated using a method that is common to each Class member and in a manner consistent with Plaintiffs’ theory of liability, for investors who purchased or otherwise acquired Deutsche Bank stock during the Class Period.¹ However, I have not been asked at this time to calculate or opine on the amount of such damages.

III. Bases for Opinions

4. My opinions are based upon my professional knowledge and experience, my review of documents and information relevant to this matter (*see* Exhibit 2), and the analyses described in this Report and its Exhibits. Documents, data, and other information that I have relied upon as bases for my opinions are cited in this Report and its Exhibits. Such documents and information are typically relied upon by financial experts in securities class actions and by financial economists in their research.

5. Counsel for Plaintiffs has informed me that the record in this matter continues to be developed and that fact discovery is ongoing. To the extent they are relevant, I would expect to review additional information that may become available through discovery as well as the reports and depositions of other expert witnesses. The opinions offered in this Report are subject to refinement or revision based on continuing analysis of the documents and information listed above, as well as new or additional information that may be provided to or obtained by me in the course of this matter.

¹ The claims in this action are set forth in the Third Amended Class Action Complaint for Violations of the Federal Securities Laws, dated June 30, 2022 (the “Complaint”).

IV. Summary of Opinions

6. As discussed below in §VI, based on my review of the available evidence in this matter, and careful analysis of data specific to Deutsche Bank relating to the efficiency factors detailed throughout this Report, I conclude that the market for Deutsche Bank stock was efficient throughout the Class Period.

7. As discussed below in §VII, it is my opinion that damages under Section 10(b) of the Exchange Act, for investors who purchased or otherwise acquired Deutsche Bank stock during the Class Period, can be calculated using a methodology that is common to the Class and in a manner that is consistent with Plaintiffs' theory of liability.

V. Overview of Deutsche Bank's Business Operations

8. Deutsche Bank "is a stock corporation organized under the laws of the Federal Republic of Germany," with headquarters in Frankfurt am Main.² At the start of the Class Period, the Company was "the largest bank in Germany and one of the largest financial institutions in Europe and the world, as measured by total assets of € 1,475 billion as of December 31, 2017."³ Deutsche Bank has described its business as "provid[ing] commercial and investment banking, retail banking, transaction banking, and asset and wealth management products and services to corporations, governments, institutional investors, small and medium-sized businesses, and private individuals."⁴

² Deutsche Bank AG, SEC Form 20-F for year-end 2016, filed March 20, 2017, pp. 5, 69.

³ Deutsche Bank, Annual Report 2017, March 16, 2018, p. 4 (available at https://investor-relations.db.com/files/documents/annual-reports/DB_Annual_Report_2017.pdf?language_id=1). *See also* Deutsche Bank, Annual Report 2020, March 15, 2021, p. 7 (available at https://investor-relations.db.com/files/documents/annual-reports/Annual_Report_2020.pdf?language_id=1).

⁴ Deutsche Bank, Non-Financial Report 2019, March 20, 2020, p. 6 (available at https://investor-relations.db.com/files/documents/annual-reports/Deutsche_Bank_Non-Financial_Report_2019.pdf?language_id=1).

9. At the start of the Class period, Deutsche Bank had the following three corporate divisions:

- i. Corporate and Investment bank (“CIB”), comprising Fixed Income and Currency (“FIC”) Sales & Trading, Equity Sales & Trading, Financing, Origination & Advisory and Global Transaction Banking businesses. The CIB division “br[ought] together the wholesale banking expertise, coverage, risk management, and infrastructure across Deutsche Bank into one division.”⁵
- ii. Private and Commercial Bank (“PCB”), comprising four business units: Postbank, Private & Commercial Clients Germany, Private & Commercial Clients International and Wealth Management. In the PCB division, the Company “serve[d] personal and private clients, small and medium-sized enterprises as well as wealthy private clients” with a “product range [that] include[d] payment and account services, credit and deposit products as well as investment advice.”⁶
- iii. Deutsche Asset Management (“Deutsche AM”), which the Company described as “one of the world’s leading investment management organizations” that “aim[ed] to provide sustainable financial solutions for all its clients: individual investors and the institutions that serve them.”⁷

The Company also reported results from its Non-Core Operations Unit Corporate Division (“NCOU”), which “was established with the aim to help the Bank reduce risks associated with capital-intensive assets that are not core to the strategy, thereby reducing capital demand.”⁸

10. In July 2019, Deutsche Bank announced “a series of measures to restructure the bank’s operations,” including “[t]he exit of Global Equities and a significant reduction in Corporate and Investment Banking risk weighted assets,” a “significant restructuring of businesses and

⁵ Deutsche Bank, Annual Report 2017, March 16, 2018, pp. 4, 5. *See also* Deutsche Bank, SEC Form 20-F for year-end 2016, filed March 20, 2017, p. 53.

⁶ Deutsche Bank, Annual Report 2017, March 16, 2018, p. 6.

⁷ Deutsche Bank, Annual Report 2017, March 16, 2018, p. 8.

⁸ *Ibid.*

infrastructure,” and that the Company would “implement a cost reduction program.”⁹ As part of the restructuring, Deutsche Bank created “[t]he Core Bank which represents [its] strategic vision [and] comprises four operating divisions: Corporate Bank; Investment Bank; Private Bank and Asset Management, together with Corporate & Other,” and a separate Capital Release Unit (“CRU”), that “includes business areas which no longer form a core part of [the Company’s] strategy or products with insufficient returns.”¹⁰ Accordingly, the Company would have six corporate divisions as follows:

- i. Corporate Bank (“CB”), which “includes the Global Transaction Bank which was previously part of the former Corporate & Investment Bank as well as the German Commercial Clients division, formerly part of the Private & Commercial Business (Germany)”;
- ii. Investment Bank (“IB”), which was “previously part of the former Corporate & Investment Bank, includes Deutsche Bank’s Origination & Advisory businesses” and “also includes Fixed Income, Currency (FIC) Sales & Trading, which includes [its] Global Credit Trading, Foreign Exchange, Rates and Emerging Markets Debt businesses”;
- iii. Private Bank (“PB”), which comprises three business units: Private Bank Germany, and Private and Commercial Business International;
- iv. Asset Management (“AM”), which operated under the DWS brand;¹¹

⁹ Deutsche Bank, Ad-hoc Release, “Deutsche Bank outlines significant strategic transformation and restructuring plans,” July 7, 2019 (available at https://www.db.com/news/detail/20190707-deutsche-bank-outlines-significant-strategic-transformation-and-restructuring-plans?language_id=1). *See also*, Deutsche Bank, “Compete to win,” July 8, 2019 (available at https://investor-relations.db.com/files/documents/other-presentations-and-events/Strategic_Announcement_8_Jul_2019.pdf?language_id=1).

¹⁰ Deutsche Bank, Annual Report 2019, March 20, 2020, p. XVIII (available at https://investor-relations.db.com/files/documents/annual-reports/Deutsche_Bank_Annual_Report_2019.pdf?language_id=1).

¹¹ DWS is an asset management firm that was spun off by the Company in March 2018 through an initial public offering on the Frankfurt stock exchange. The Company retained a 79.49% ownership interest in DWS throughout the Class Period. *See* Deutsche Bank, Annual Report 2019, March 20, 2020, p. 9. *See also* Deutsche Bank, Annual Report 2020, March 15, 2021, p. 10.

- v. CRU; and
- vi. Corporate and Other (“C&O”), which “includes revenues, costs and resources held centrally that are not allocated to the individual business segments.”¹²

11. As of December 31, 2016, the Company had approximately 99,744 employees “on a full-time equivalent basis.”¹³ As of December 31, 2019, Deutsche Bank had approximately 87,597 “full-time equivalent internal employees.”¹⁴ The Company’s total reported revenues for 2017 through 2020, by operating segment, were as follows:¹⁵

Revenue (in millions)	2017	2018	2019	2020
Corporate Bank	€ 5,376	€ 5,278	€ 5,244	€ 5,145
Investment Bank	€ 8,303	€ 7,561	€ 7,019	€ 9,283
Private Bank	€ 8,732	€ 8,520	€ 8,206	€ 8,126
Asset Management	€ 2,532	€ 2,187	€ 2,332	€ 2,229
Capital Release Unit	€ 2,044	€ 1,911	€ 217	-€ 225
Corporate & Other	-€ 539	-€ 142	€ 147	-€ 530
Total	€ 26,447	€ 25,316	€ 23,165	€ 24,028

12. During the Class Period, Deutsche Bank’s common stock was dual-listed on the New York Stock Exchange (“NYSE”) and the German Xetra Exchange (“Xetra”) under the symbols “DB” and “DBK,” respectively.¹⁶

¹² Deutsche Bank, Annual Report 2019, March 20, 2020, p. 266; Deutsche Bank, Annual Report 2020, March 15, 2021, p. 7.

¹³ Deutsche Bank, Annual Report 2016, March 20, 2017, p. 252 (available at https://investor-relations.db.com/files/documents/annual-reports/Deutsche_Bank_Annual_Report_2016.pdf?language_id=1).

¹⁴ See Deutsche Bank, Annual Report 2019, March 20, 2020, p. 5.

¹⁵ Deutsche Bank, Annual Report 2020, March 15, 2021, pp. 18, 19; Deutsche Bank, Annual Report 2019, March 20, 2020, p. 19.

¹⁶ Source: Bloomberg. See also Deutsche Bank AG, SEC Form 20-F for year-end 2019, filed March 20, 2020, p. 96; Deutsche Bank AG, SEC Form 20-F for year-end 2016, filed March 20, 2017, p. 102.

VI. The Market for Deutsche Bank Stock Was Efficient Throughout the Class Period

13. In this case, Lead Plaintiff has asserted the “fraud-on-the-market” presumption of reliance. The “fraud-on-the-market” theory was first addressed by the U.S. Supreme Court in *Basic, Inc. v. Levinson*:

In an open and developed securities market, the price of a company’s stock is determined by the available material information regarding the company and its business.... Misleading statements will therefore defraud purchasers of stock even if the purchasers do not directly rely on the misstatements.... The causal connection between the defendants’ fraud and the plaintiffs’ purchase of stock in such a case is no less significant than in a case of direct reliance on misrepresentations.¹⁷

14. Since *Basic*, academic economists have debated various forms of the efficient capital market hypothesis (“ECMH”).¹⁸ In 2014, the Supreme Court clarified that *Basic* did not “endorse ‘any particular theory of how quickly and completely publicly available information is reflected in market price.’”¹⁹ On the contrary, the “fraud-on-the-market” theory is based “on the fairly modest premise that ‘market professionals generally consider most publicly announced

¹⁷ *Basic, Inc. v. Levinson*, 485 U.S. 224, 241–242 (1988).

¹⁸ Generally speaking, academic economists consider there to be three forms of market efficiency: “weak” form; “semi-strong” form; and “strong” form market efficiency. (See Elton, E., M. Gruber, S. Brown and W. Goetzmann, *Modern Portfolio Theory and Investment Analysis*, 6th ed., John Wiley and Sons, Inc., 2007, p. 400.) In “fraud-on-the-market” litigation, several courts reference the semi-strong form of efficiency, which implies that market prices incorporate all publicly available information. In academic finance literature, this is referred to as “informational efficiency.” This hypothesis has been empirically validated in numerous studies. (See, e.g., Fama, Eugene F., 1970 “Efficient Capital Markets: A Review of Theory and Empirical Work,” *Journal of Finance*, Vol. 25, Issue 2, pp. 383–417.) The ECMH also has stood up against its critics; while anomalies have occurred in financial markets, they appear to be random and do not allow for trading strategies that would create abnormal profits. (See, e.g., Fama, Eugene F., 1998, “Market Efficiency, Long-term Returns, and Behavioral Finance,” *Journal of Financial Economics*, Vol. 49, pp. 283–306; Malkiel, Burton G., 2003, “The Efficient Market Hypothesis and Its Critics,” *Journal of Economic Perspectives*, Vol. 17, pp. 59–82.)

¹⁹ *Halliburton Co. v. Erica P. John Fund, Inc.*, 134 S. Ct. 2398, 2403 (2014) (“*Halliburton II*”), quoting *Basic*, 485 U.S. at 248, n. 28.

material statements about companies, thereby affecting stock market prices.’”²⁰ Under this theory, investors’ reliance on any public material misrepresentations and/or omissions may be presumed for purposes of a Rule 10b-5 action since the effects of those misrepresentations and/or omissions will already be impounded in the market price.²¹

15. While the Supreme Court in *Halliburton II* stated that a market need only be “generally efficient” to invoke the “fraud-on-the-market” presumption, it did not adopt any particular test of general market efficiency.²² Accordingly, I consider in this Report tests of efficiency that courts have commonly used in securities litigation for over 30 years. An empirical test of market efficiency is to examine price responsiveness to the release of new and material information about the company in question. If the security price responds quickly, the response supports a conclusion that the market for the security is efficient. Additional tests include the examination of certain market conditions that have been found to promote efficiency.

16. Consistent with *Basic* and *Halliburton II*, the oft-cited *Cammer v. Bloom* decision considered “efficient markets” to be “markets which are so active and followed that material information disclosed by a company is expected to be reflected in the stock price.”²³ The court in *Cammer* identified five non-exhaustive factors that may be considered in determining whether the market for a security is efficient.²⁴ I understand that courts throughout the country assessing

²⁰ *Id.*, quoting *Basic*, 485 U.S. at 246, n. 24.

²¹ *Basic*, 485 U.S. at 241–242, 244, quoting *Peil v. Speiser*, 806 F.2d 1154, 1160–61 (3d Cir. 1986). See also, *Erica P. John Fund, Inc. v. Halliburton Co.*, 563 U.S. 804 (2011).

²² *Halliburton II*, 134 S. Ct. at 2404.

²³ *Cammer v. Bloom*, 711 F. Supp. 1264, 1273 n.11 (D.N.J. 1989).

²⁴ “The vast majority of courts have used the *Cammer* factors as ‘an analytical tool rather than as a checklist.’ Indeed, not even the *Cammer* court considered the fifth factor necessary, stating only that ‘it *would be helpful* to a plaintiff seeking to allege an efficient market’” *Carpenters Pension Trust Fund of St. Louis v. Barclays PLC*, 310 F.R.D. 69, 83 (S.D.N.Y.

the applicability of the “fraud-on-the-market” doctrine, including courts in the Second Circuit, have widely adopted these five factors in evaluating market efficiency.²⁵ In concluding that the market for Deutsche Bank stock was efficient throughout the Class Period, I considered each of the following five *Cammer* factors as applied to the stock:

- i. whether the security trades at a large weekly volume;
- ii. whether analysts follow and report on the security;
- iii. whether the security has market makers and whether there is a potential for arbitrage activity;
- iv. whether the company is eligible to file SEC Form S-3; and
- v. whether empirical facts show a cause-and-effect relationship between the release of new, material information about the company in question and a response in the security’s price.²⁶

17. In addition to these five *Cammer* Factors, I have considered three other factors that have also been considered by courts in evaluating market efficiency.²⁷ These additional factors are:

- i. the company’s market capitalization;
- ii. the bid/ask spread on transactions in the security; and

2015). “Different contexts require courts to place greater importance on some factors than on others. No other court has adopted a per se rule that any one factor is dispositive. At the same time, courts have found market efficiency in the absence of an event study or where the event study was not definitive.” *Id.*, at 84.

²⁵ See, e.g., *Unger v. Amedisys Inc.*, 401 F.3d 316, 323 (5th Cir. 2005); *Bell v. Ascendant Solutions, Inc.*, 422 F.3d 307, 313 n.10 (5th Cir. 2005); *In re DVI, Inc. Sec. Litig.*, 249 F.R.D. 196, 214-217 (E.D. Pa. 2008), *aff’d* 659 F.2d 623 (3d Cir. 2011); *In re Petrobras Securities*, 862 F.3d 250, 276 (2d Cir. 2017) (finding that a test based on the *Cammer* Factors “has been routinely applied by district courts considering the efficiency of equity markets”); *Villella v. Chem. & Mining Co. of Chile Inc.*, 333 F.R.D. 39 (S.D.N.Y. 2019) (“courts routinely consider the following non-exhaustive list of factors, commonly referred to as the *Cammer* factors”); *Waggoner v. Barclays PLC*, 875 F.3d 79, 98 (2d Cir. 2017) (noting that the *Cammer* factors are tools for analyzing market efficiency).

²⁶ *Cammer*, 711 F. Supp. at 1285–1287.

²⁷ *Unger*, 401 F.3d 316 at 323, HN10; *Bell*, 422 F.3d 307 at 313, n10; *Krogman v. Sterritt*, 202 F.R.D. 467, 478 (N.D. Tex. 2001).

- iii. the security's public float.

As demonstrated below in §VI.i.A–§VI.i.H, an analysis of these factors supports my conclusion that the market for Deutsche Bank stock was informationally efficient throughout the Class Period.

i. Application of the *Cammer* Factors Demonstrates That the Market for Deutsche Bank Stock Was Efficient During the Class Period

A. *Cammer* Factor 1: Weekly Trading Volume

18. A market for a security is liquid if investors can trade a large number of securities on demand. Liquidity allows investors to buy and sell securities quickly when their assessments about the value of a company have changed, facilitating the prompt price reaction to new, material information that is characteristic of an efficient market. The large weekly trading volume of Deutsche Bank stock during the Class Period indicates the presence of a liquid market.

19. According to the *Cammer* decision:

[T]he existence of an actively traded market, as evidenced by a large weekly volume of stock trades, suggests there is an efficient market ... because it implies significant investor interest in the company. Such interest, in turn, implies a likelihood that many investors are executing trades on the basis of newly available or disseminated corporate information.²⁸

20. Under *Cammer*, “turnover measured by average weekly trading of 2% or more of the outstanding shares would justify a strong presumption that the market for the security is an efficient one; 1% would justify a substantial presumption.”²⁹ During the Class Period, the total number of Deutsche Bank shares issued and outstanding ranged between 1.38 billion to 2.07

²⁸ *Cammer*, 711 F. Supp. at 1286.

²⁹ *Cammer*, 711 F. Supp. at 1293, quoting *Bromberg*.

billion shares.³⁰ The average weekly reported trading volume for Deutsche Bank shares on U.S. and German exchanges, excluding weeks not entirely contained within the Class Period, was as follows:³¹

	U.S.	Germany	Total
Average Weekly Trading Volume in Shares	25,988,812	79,517,318	105,506,130
Average Weekly Share Trading Volume as a % of Shares Outstanding	1.3%	3.9%	5.2%

Thus, the average weekly reported trading volume for Deutsche Bank stock exceeded the 2% “strong presumption” of market efficiency set out by *Cammer*.

21. The high trading volume observed during the Class Period demonstrates an actively traded market for Deutsche Bank stock, showing significant investor interest in the Company and implying a likelihood that many investors executed trades on the basis of newly available or disseminated corporate information. These circumstances support my conclusion that Deutsche Bank stock traded in an efficient market throughout the Class Period.

B. *Cammer* Factor 2: Number of Securities Analysts

22. In demonstrating market efficiency, the *Cammer* decision states:

[I]t would be persuasive to allege a significant number of securities analysts followed and reported on a company’s stock during the class period. The existence of such analysts would imply, for example, the [auditor’s] reports were closely reviewed by investment professionals, who would in turn make buy/sell recommendations to client investors. [] In this way the market price of the stock would be bid up or down to reflect the financial information contained in the [auditor’s] reports, as interpreted by the securities analysts.³²

³⁰ Source: Bloomberg.

³¹ See Exhibit 4 for a summary of weekly trading volume and shares outstanding.

³² *Cammer*, 711 F. Supp. at 1286.

23. Securities analysts research and report to investors on the financial condition and prospects of a covered company. Analysts are conduits to the market for information collected from on-site visits, conference calls accompanying key company announcements, and other contacts with senior management. Analysts can channel new information to the market rapidly through their published reports, online reporting services, and alerts given to clients and other employees of the same investment firm. Analysts thus facilitate the dissemination of new information to investors and any corresponding price reaction in a company's securities.

24. During the Class Period, several well-known investment firms followed and published research reports on Deutsche Bank that are publicly available from Refinitiv Eikon and Bloomberg, including, but not limited to: Banco Santander; Barclays; Berenberg; BNP Paribas Exane; BofA Global Research; Commerzbank Corporate Clients; Credit Suisse; DBRS Morningstar; ESN/ equinet Bank (Germany); Financiële Diensten Amsterdam; Hammer Partners; HSBC; JPMorgan; Keefe, Bruyette & Woods; Kepler Cheuvreux; Macquarie Research; Morgan Stanley; Morningstar, Inc.; Natixis FICC Research; Pareto Securities AS; RBC Capital Markets; Societe Generale; UBS Equities; UniCredit Research; and Zacks Equity Research.³³ Over 1,200 analyst reports pertaining to the Company were issued during the Class Period.³⁴ According to Bloomberg, AlphaValue/Baader Europe; Banco Sabadell; Bankhaus Lampe; Bankhaus Metzler; Citi; Creative Global Investments; Day by Day; DZ Bank AG Research; Equita SIM; Goldman Sachs; Grupo Santander; Hamburger Sparkasse; Independent Research

³³ See Exhibit 5. Exhibit 5B lists research reports on Deutsche Bank available from Refinitiv Eikon and Bloomberg. These reports are only a subset of all reports pertaining to Deutsche Bank published during the Class Period. Other databases, including restricted databases, may carry research reports pertaining to Deutsche Bank that are not included in Exhibit 5B. Furthermore, it is my understanding that certain analyst firms do not make all their reports available through historical and/or public databases.

³⁴ *Ibid.*

GmbH; ISS-EVA; M.M. Warburg Co.; Mainfirst; Mediobanca; NORD/LB; Oddo BHF; Redburn; Spin-Off Research; and Wise-owl.com also followed and issued reports on the Company during the Class Period.³⁵ In addition, Autonomous Research LLP; Jefferies LLC; and PGIM Fixed Income participated in at least one of the Company's conference calls during the Class Period.³⁶

25. Investors also received information and analyses about Deutsche Bank during the Class Period via media coverage, investor conferences, trade magazines, Company presentations and SEC filings. Specifically, over 70,000 articles concerning Deutsche Bank appeared in major domestic and international news media including: *Agence France Presse*; *American Banker*; *Benzinga.com*; *BILD*; *Bloomberg*; *Business Insider*; *Business Wire*; *CE Noticias Financieras (Latin America)*; *CNN*; *Daily Mail*; *DGAP Regulatory News (Germany)*; *Die Welt*; *Dow Jones Newswires*; *dpa International Service*; *Euromoney*; *Evening Standard*; *Frankfurter Allgemeine Zeitung*; *Frankfurter Rundschau*; *Global Banking News*; *Handelsblatt*; *Il Sole*; *MarketLine*; *Marketscreener.com*; *MarketWatch*; *Moody's Investors Service*; *New York Law Journal*; *PR Newswire*; *Regulatory News Service (U.K.)*; *Reuters*; *RTT News (U.S.)*; *Seeking Alpha*; *SNL Financial*; *Süddeutsche Zeitung*; *The Associated Press*; *The Economic Times*; *The Independent*;

³⁵ See Exhibit 5C, which lists analysts' price targets and rating actions on selected event dates during the Class Period as reported by Bloomberg.

³⁶ See, e.g., *Thomson Reuters, StreetEvents*, "DBK.DE – Q1 2017 Deutsche Bank AG Earnings Call, Event Date/Time: April 27, 2017 / 12:00PM GMT," April 27, 2017, 8:00 AM; *Thomson Reuters, StreetEvents*, "DBK.DE – Q2 2018 Deutsche Bank AG Earnings Call, Event Date/Time: July 27, 2018 / 12:00AM GMT," July 27, 2018, 8:00 AM; *Thomson Reuters, StreetEvents*, "DBK.DE – Q1 2019 Deutsche Bank AG Earnings Call, Event Date/Time: April 26, 2019 / 8:00AM GMT," April 26, 2019, 4:00 AM; *Thomson Reuters, StreetEvents*, "DBK.DE – Q4 2019 Deutsche Bank AG Earnings Call (Fixed Income Investor), Event Date/Time: February 03, 2020 / 2:00PM GMT," February 3, 2020, 9:00 AM.

*The Irish Times; The New York Times; The Telegraph (U.K.); The Times (U.K.); The Wall Street Journal; and Theflyonthewall.com.*³⁷

26. In addition, Deutsche Bank’s filings with the SEC were publicly available online during the Class Period at no cost.³⁸ Deutsche Bank’s SEC filings during the Class Period included its consolidated quarterly and year-end financial statements and Company press releases.³⁹ The Company’s filings with the German securities regulators were also made available on the “Company Register” (“Unternehmensregister” in German).⁴⁰

27. The coverage of Deutsche Bank by securities analysts and the amount of public reporting on Deutsche Bank during the Class Period indicate that Company-specific news was widely disseminated to investors in both the U.S. market and the German market, thereby facilitating the incorporation of such information into the market price of Deutsche Bank stock in both markets. Accordingly, this factor supports my conclusion that Deutsche Bank stock traded in an efficient market throughout the Class Period.

C. *Cammer* Factor 3: Number of Market Makers and the Potential for Arbitrage

28. The third *Cammer* factor concerns the existence of market makers and arbitrageurs who can react quickly to news and facilitate trading. As discussed below, the fact that trading in Deutsche Bank stock was facilitated by numerous market makers, including a designated market maker on the NYSE, and the fact that investors could have exploited arbitrage opportunities during the Class Period, support a finding of market efficiency.

³⁷ Source: Dow Jones’ Factiva (www.factiva.com); Bloomberg; internet search.

³⁸ The SEC’s EDGAR website is located at <http://www.sec.gov/edgar.shtml>.

³⁹ Exhibit 6 includes a list of Deutsche Bank’s filings with the SEC during the Class Period.

⁴⁰ See <https://www.unternehmensregister.de/ureg/index.html>.

Market Makers

29. The NYSE, where Deutsche Bank was listed during the Class Period, uses a single designated market-maker (“DMM”), formerly known as a specialist, to maintain a competitive and efficient market for the securities assigned to that firm. DMMs are independent companies in corporate or partnership structures that have obligations to “quote at the NBBO [National Best Bid and Offer] a specified percentage of the time, and facilitate price discovery throughout the day as well as at the open, close and in periods of significant imbalances and high volatility.”^{41, 42} DMMs “manage a physical auction to combine with an automated auction that includes algorithmic quotes from other DMMs and market participants.”⁴³ DMMs are also “required to meet stringent NYSE depth and continuity standards.”⁴⁴ DMMs thus enable investors to trade promptly upon the arrival of new relevant information, allowing new information to be rapidly reflected in security prices.

30. With respect to the Xetra, market makers, known as “Designated Sponsors,” “ensure trading is liquid and price quality is high.”⁴⁵ Xetra describes its Designated Sponsor program as follows:

Designated Sponsors have to meet high quality standards as regards providing liquidity. For example, for quotes they have to abide by a maximum spread (difference between the bid and the sell price) and a minimum quote volume (number of units). Deutsche Börse compiles a rating on a quarterly basis of the Designated Sponsors to ensure their services are transparent. The rating includes

⁴¹ “NBBO” is the national best bid and offer prices for a security available in all exchanges and quoted by market makers at any given time.

⁴² <https://www.nyse.com/market-model>.

⁴³ <https://www.nyse.com/markets/nyse/membership>.

⁴⁴ *Ibid.*

⁴⁵ <https://www.deutsche-boerse-cash-market.com/dbcm-en/primary-market/being-public/Market-Makers-17156>.

each designated Sponsor's average quote duration, the average spread and turnover.

By constantly monitoring the markets, Designated Sponsors have an expert knowledge of both the shares whose liquidity they support and the sectors to which these shares belong. Depending on the issuer's requirements and the Designated Sponsor's service portfolio this expertise can then be brought to bear in additional services, such as research, investor relations and market reports. Through their work, Designated Sponsors can strengthen relationships with their key clients in the fields of corporate finance and trading and forge links to new investors and analysts. In this way, Designated Sponsors make an important contribution to enhancing liquidity in the shares in exchange trading and to positioning the company in the capital markets.⁴⁶

31. As is the case with all NYSE-listed equities, Deutsche Bank stock also traded on other national securities markets as well as Alternative Trading Systems ("ATS") in the U.S. during the Class Period, including the NASDAQ. NASDAQ market participants are made up of "market makers, order-entry firms and electronic communications networks (ECNs) that utilize NASDAQ's trading services."⁴⁷ NASDAQ defines a market maker as a "NASDAQ member firm that buys and sells securities at prices it displays in NASDAQ for its own account (principal trades) and for customer accounts (agency trades)."⁴⁸ Market makers help to ensure a liquid market for a particular stock; a market in which willing buyers can readily find willing sellers, and vice versa. A market maker is obligated to "engage in a course of dealings for its own account to assist in the maintenance, insofar as reasonably practicable, of fair and orderly markets."⁴⁹ Market makers in a particular stock stand ready to provide stock price quotations and facilitate trading by purchasing that stock from and selling to investors. They also buy and

⁴⁶ *Ibid.*

⁴⁷ <https://www.nasdaqtrader.com/Trader.aspx?id=MarketMakerProcess>.

⁴⁸ *Ibid.*

⁴⁹ Nasdaq Rule 4600, Requirements for Nasdaq Market Makers and Other Nasdaq Market Center Participants (available at https://listingcenter.nasdaq.com/assets/rulebook/nasdaq/rules/new_listing_rules.pdf).

sell securities and may increase or reduce their inventory when pricing discrepancies exist.

Market makers display both buy and sell quotes in all securities in which they choose to make a market and are subject to disciplinary action if they fail to honor their quoted prices.⁵⁰

Accordingly, market efficiency can be facilitated by market maker involvement.

32. I obtained NASDAQ market maker activity in Deutsche Bank stock from Bloomberg. During the Class Period, there were more than 130 active market makers that traded Deutsche Bank stock (data reported monthly from March 2017 to September 2020, inclusive). In addition, many of the market makers that facilitated trading in Deutsche Bank stock handled a sizeable volume of shares.⁵¹ The substantial number of market makers for Deutsche Bank stock supports my conclusion that the market for the stock was efficient throughout the Class Period.

Arbitrage Activity

33. Related to *Cammer* Factor 3 is the existence of arbitrageurs, sophisticated investors who can act rapidly to take advantage of security pricing discrepancies. Arbitrageurs ensure that market prices reflect public information—the fundamental hallmark of market efficiency.⁵² As I

⁵⁰ *Ibid.*

⁵¹ See Exhibit 7 for the share volume by market maker for Deutsche Bank stock.

⁵² Arbitrage has been defined as:

... the process of earning riskless profits by taking advantage of differential pricing for the same physical asset or security. As a widely applied investment tactic, arbitrage typically entails the sale of a security at a relatively high price and the simultaneous purchase of the same security (or its functional equivalent) at a relatively low price.

Arbitrage activity is a critical element of modern, efficient security markets. Because arbitrage profits are by definition riskless, all investors have an incentive to take advantage of them whenever they are discovered. Granted, some investors have greater resources and inclination to engage in arbitrage than others. However, it takes relatively few of these active investors to exploit arbitrage situations and, by their buying and selling actions, eliminate these profit

demonstrate below, the level of short interest, the degree of institutional ownership, and the tightness of bid/ask spreads suggest that arbitrage activity for Deutsche Bank stock was prevalent during the Class Period.

34. One way in which arbitrageurs can exploit mispricing in the market is by engaging in short-sale transactions. A short sale is a transaction in which an investor sells a stock that he or she does not own and then purchases that stock back in the future. If the price declines between the time a security is sold short and the time it is purchased, the short seller realizes a gain. Thus, short selling is an advantageous strategy if an arbitrageur expects a security's price to decline in the future.⁵³ Furthermore, short sales allow arbitrageurs that currently do not own a security to convey their opinions to the market, thereby helping the market to achieve a consensus as to that security's fair value given all publicly available information.

35. Arbitrageurs were not constrained in their ability to short shares of Deutsche Bank stock. During the Class Period, the average short interest as a percentage of float for the total U.S. market was 3.92%.⁵⁴ Similarly, economist Gene D'Avolio found that short interest was, on average, 2.30% of shares outstanding for companies listed in the U.S. during the period April 2000 to September 2001.⁵⁵ D'Avolio also estimated that as much as one-quarter of the U.S. market capitalization was available as loan supply for short-selling and that only 7% of that

opportunities. (Sharpe, William F., et al., *Investments*, Prentice Hall, 6th ed., 1999, p. 284.)

⁵³ Berk, Jonathan and Peter DeMarzo, *Corporate Finance*, Pearson Education, Inc., 1st ed., 2007, Ch. 11, p. 339.

⁵⁴ Source: Bloomberg. (See Exhibit 8A.)

⁵⁵ D'Avolio, Gene, 2002, "The market for borrowing stock," *Journal of Financial Economics*, Vol. 66, pp. 271–306.

capacity was utilized, thereby indicating that “[t]he aggregate market is easy to borrow.”⁵⁶ In comparison, the average short interest for Deutsche Bank stock during the Class Period was 2.69% of its public float.^{57, 58}

36. Institutional ownership is another indicator of arbitrage activity in that institutional investors, such as pension funds, mutual funds and investment banks, are generally considered to be sophisticated investors that have ready access to minute-to-minute financial news and to online bulletins from analysts. Relative to most individual investors, institutional investors have significantly greater resources with which to analyze public information pertinent to the securities in which they invest. Institutional ownership implies that investment professionals actively review company-specific financial information and, in turn, make buy/sell

⁵⁶ *Id.*, p. 273.

⁵⁷ See Exhibit 8B for a summary of short interest for Deutsche Bank stock during the Class Period. Public float is equal to shares outstanding less insider holdings. A comparison of short interest to public float is relevant as public float represents the shares available to lend for short sales.

⁵⁸ FINRA (the Financial Industry Regulatory Authority) was created in July 2007 from the consolidation of the NASD and various regulatory functions of the NYSE. It is a non-governmental organization that regulates member brokerage firms and exchange markets, and is overseen by the SEC, the ultimate regulator of the U.S. securities industry, including FINRA. (See <https://www.finra.org/media-center/news-releases/2007/nasd-and-nyse-member-regulation-combine-form-financial-industry>.) Every firm and broker that sells securities to the public in the United States must be licensed and registered by FINRA. (See <https://www.finra.org/registration-exams-ce/broker-dealers/become-new-finra-registered-broker-dealer-firm>.) Pursuant to FINRA Rule 4560:

member firms are required to report total short positions in all customer and proprietary firm accounts in all equity securities to FINRA on a bi-monthly basis. These filings are made online using the Short Interest reporting system accessible via FINRA Gateway at firms.finra.org. ... Member firms that have short positions in OTC equity securities and in securities listed on a national securities exchange, such as NASDAQ, NYSE, NYSE American, NYSE Arca, Cboe BZX, and IEX, must file a Short Position Report with FINRA via the Web-based system. (See <https://www.finra.org/filing-reporting/short-interest/regulation-filing-applications-instructions>.)

recommendations to their firm and/or client investors. In this way, investors bid up or down the market price of a security to reflect all publicly available information, as interpreted by institutional investors. Moreover, because short sellers often borrow shares from institutions, a high degree of institutional ownership relative to the level of short interest indicates a lack of short-sale constraints, thereby facilitating market efficiency by enabling arbitrageurs to engage in short selling.⁵⁹

37. According to reported quarter-end holdings data for Deutsche Bank stock provided by Refinitiv Eikon, institutions held between 39% and 52% of the Company's float, and between 559 and 730 institutional investors held Deutsche Bank stock, during the Class Period.⁶⁰ Additionally, reported institutional holdings were, on average, over 16 times the level of short interest in Deutsche Bank stock during the Class Period, indicating that short selling was not constrained.⁶¹ Furthermore, according to the Company, 81% and 76% of its shares outstanding was held by institutional shareholders (including banks) at year-end 2017 and year-end 2020, respectively.⁶²

⁵⁹ Asquith, Paul, Parag A. Pathak and Jay R. Ritter, 2005, "Short interest, institutional ownership and stock returns," *Journal of Financial Economics*, Vol. 78, pp. 243–76. Asquith, *et al.*, find that "[i]n a typical year, there are 5,500 domestic operating companies trading on the NYSE, Amex, and the Nasdaq National Market System. For these stocks, ... institutional ownership is greater than short sales for 95% of stocks, suggesting that short-sale constraints are not common." (*Id.*, p. 245.)

⁶⁰ Institutions that file Form 13F with the SEC report shares held as of the end of each calendar quarter. See Exhibit 9 for a summary of reported institutional holdings for Deutsche Bank stock during the Class Period.

⁶¹ The average number of shares held by institutions for the quarters ended during the Class Period was approximately 924.7 million, and the average short interest during the Class Period for the U.S. and Germany combined was approximately 55.1 million shares.

⁶² See Deutsche Bank, Annual Report 2017, March 16, 2018, p. XX; <https://web.archive.org/web/20210905201116/https://investor-relationsdb.com/share/shareholder-structure>.

38. Another indicator of the potential for arbitrage activity to correct market inefficiencies (*i.e.*, arbitrage opportunities) is the size of bid/ask spreads. Bid/ask spreads are a measure of transaction costs and low transaction costs indicate that arbitrage opportunities can be exploited readily. As shown in the following table, during the Class Period, the average and median bid/ask spreads on Deutsche Bank stock were comparable to those of randomly sampled stocks listed on the NYSE.⁶³

	Deutsche Bank Stock ⁶⁴		NYSE Sample	
	Spread (\$)	Spread (%)	Spread (\$)	Spread (%)
Average:	\$0.01	0.10%	\$0.04	0.12%
Median:	\$0.01	0.10%	\$0.03	0.09%

39. The fact that Deutsche Bank's bid/ask spreads were comparable to those of other stocks listed on the NYSE supports my conclusion that the Company's stock traded in an efficient market throughout the Class Period.

40. In addition, as discussed further below, the high level of intraday price parity between U.S. and German markets strongly demonstrates the involvement of informed investors and arbitrageurs, in both markets, seeking to profit from intraday price discrepancies (*i.e.*, the fundamental facilitators of market efficiency).⁶⁵

⁶³ The bid/ask spread analysis reported in Exhibit 10A and 10B compares the bid/ask spreads of Deutsche Bank stock on each day during the Class Period to those of 100 randomly selected NYSE-listed stocks.

⁶⁴ On the Xetra, the average and median bid/ask spreads for Deutsche Bank stock during the Class Period were 0.26% and 0.24%, respectively. This compares to an average and median spread of 1.78% and 1.52%, respectively, for a random sample of stocks listed on the Xetra. (See Exhibit 10C and 10D.)

⁶⁵ See *infra* §VI.ii.

D. *Cammer* Factor 4: Eligibility to File SEC Form S-3

41. The *Cammer* court discussed the relationship between S-3 eligibility and efficiency, noting that “[t]he issue is not whether [the company] recently completed a public offering, but whether, if it did, it would enjoy the benefit of making abbreviated prospectus disclosure because the SEC viewed it to be in an efficient market where documents ‘on file’ could be deemed to be known by the investment community.”⁶⁶

42. Form S-3 is a simplified registration form that may be used by U.S. companies that meet the following requirements:

- i. it has been subject to the Securities Exchange Act of 1934 reporting requirements for more than one year;
- ii. it has filed all required documents in a timely manner during the prior twelve months;
- iii. it has not, since the last audited statements, failed to pay required dividends or sinking fund installments on preferred stock, or defaulted on debts or material leases; and
- iv. it meets certain minimum stock requirements.^{67, 68}

Companies eligible for filing Form S-3 are permitted to incorporate prior filings by reference into current filings, and need not repeat such information since it is already widely publicly available.

⁶⁶ *Cammer*, 711 F. Supp. at 1284 n.32.

⁶⁷ <http://www.sec.gov/about/forms/forms-3.pdf>.

⁶⁸ Prior to January 28, 2008, the SEC required a minimum of \$75 million in stock be held by non-affiliates. Effective January 28, 2008, a company with a non-affiliate public float of less than \$75 million is permitted to file Form S-3 with certain restrictions. (*See* Securities and Exchange Commission, 17 CFR Parts 230 and 239 [Release No. 33-8878; File No. S7-10-07], RIN 3235-AJ89, Revisions to the Eligibility Requirements for Primary Securities Offerings on Forms S-3 and F-3.)

43. It is the SEC’s view that these Form S-3 eligible companies—those that disclose financial information to the SEC and issue press releases to the public—have already disseminated information to the marketplace, and, therefore, that the market operates efficiently for them.⁶⁹ Certain courts have also stated that the ability to file Form S-3 is an indicator of market efficiency:

Corporations permitted to use the S-3 form are thus presumed to be actively traded and widely followed. *See Harman*, 122 F.R.D. at 525. Therefore, a company’s ability to file an S-3 Registration Statement points to market efficiency.⁷⁰

44. Form F-3 for foreign issuers in the U.S. is the functional equivalent to Form S-3 used by U.S. issuers. The registrant requirements in Form F-3 are essentially identical to the Registrant Requirements in Form S-3 and include that the company:⁷¹

has been subject to the requirements of Section 12 or 15(d) of the Exchange Act and has filed all the material required to be filed pursuant to Sections 13, 14 or 15(d) of the Exchange Act for a period of at least twelve calendar months immediately preceding the filing of the registration statement on this Form.

45. Deutsche Bank filed Form F-3s before, during, and after the Class Period.⁷² That Deutsche Bank was eligible to file Form F-3 throughout the Class Period supports my conclusion that the market for its stock was efficient during that time.

⁶⁹ SEC Securities Act Release No. 6331 (August 18, 1981), pp. 5, 6.

⁷⁰ *Krogman*, 202 F.R.D. at 476.

⁷¹ For Form F-3 eligibility requirements, *see* <https://www.sec.gov/about/forms/formf-3.pdf>. For Form S-3 eligibility requirements, *see* <https://www.sec.gov/about/forms/forms-3.pdf>.

⁷² Prior to the Class Period, Deutsche Bank filed Form F-3ASR (“Automatic shelf registration statement of securities of well-known seasoned issuers”) on July 31, 2015. During the Class Period, the Company filed Form F-3 on June 22, 2017 and July 30, 2018, and Form F-3/A on August 14, 2018 and August 17, 2018. After the Class Period, the Company filed Form F-3ASR on August 3, 2021. Source: Edgar Pro (pro.edgar-online.com).

E. *Cammer* Factor 5: Empirical Facts Showing a Cause-and-Effect Relationship Between Unexpected Corporate Events or Financial Releases and the Price Reaction of Deutsche Bank Stock

46. *Cammer* Factor 5 relates to how a security's price reacts to new, material information.

The *Cammer* court stated that:

... one of the most convincing ways to demonstrate [market] efficiency would be to illustrate, over time, a cause and effect relationship between the company disclosures and resulting movements in stock price.⁷³

47. A test of market efficiency is to conduct what is known as an “event study” to examine whether security prices respond to new, material information released to the market. Expert economists commonly use an event study in securities litigation to correlate the disclosure of new, material information to security price response.⁷⁴ Event studies comprise numerous steps, including: (i) the *a priori* definition and selection of events to study; (ii) identification of a study period; (iii) estimation of a regression model to remove non-company-specific effects from the security's return; (iv) testing for statistical significance; and (v) interpretation of empirical

⁷³ *Cammer*, 711 F. Supp. at 1291.

⁷⁴ I note that “[c]ourts have rejected the idea that the fifth *Cammer* factor is necessary to establish market efficiency.” *W. Palm Beach Police Pension Fund v. DFC Glob. Corp.*, 2016 WL 4138613, at *12 (E.D. Pa. Aug. 4, 2016); *see also Waggoner*, 875 F.3d at 96-98 (“direct evidence of price impact under *Cammer* 5,” such as an event study, “is not always necessary to establish market efficiency and invoke the *Basic* presumption”).

results.⁷⁵ Academic research acknowledges that some variation in approaches to event studies is permitted.⁷⁶

48. I performed a standard event study for Deutsche Bank stock trading in both the U.S. and German markets to determine whether new, material corporate events or financial releases promptly caused a measurable stock price reaction after accounting for contemporaneous market and industry effects. As set forth in Exhibit 12, my event study demonstrates a cause-and-effect relationship between new, material, Company-specific disclosures and resulting movements in Deutsche Bank's stock price during the Class Period. The regression analyses used in the event study, from which I have estimated Deutsche Bank's Company-specific returns (*i.e.*, returns net of market and industry effects), are described in Appendix A and Exhibit 11.⁷⁷

⁷⁵ As described by Mitchell and Netter (1994):

The execution of an event study is quite simple. It involves the identification of an event that causes investors to change their expectations about the value of a firm. The investigator compares a stock price movement contemporaneous with the event to the expected stock price movement if the event had not taken place. There are three basic steps in conducting an event study: (i) define the event window; (ii) calculate abnormal stock price performance around the event; and (iii) test for statistical significance of the abnormal stock price performance.

(See Mitchell, Mark L. and Jeffry M. Netter, 1994, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer*, Vol. 49, pp. 557, 558.)

⁷⁶ However, "[w]hile there is no unique structure, the analysis can be viewed as having seven steps." Those steps are event definition, selection criteria, normal and abnormal returns, estimation procedure, testing procedure, empirical results, and interpretation and conclusion. (See Campbell, John Y., Andrew W. Lo, and A. Craig MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 1997, pp. 150–152.)

⁷⁷ My estimated regression equations for the U.S. and German markets appear in Exhibits 11A and 11D, respectively. Exhibits 11B and 11E show Deutsche Bank's expected and residual returns estimated from the regression models on each day of the Class Period for the U.S. and German markets, respectively.

49. To determine which events to include in my analysis, I relied on my knowledge of a large body of event-study literature that has evaluated what types of information affect stock prices.⁷⁸ Specifically, I examined dates during the Class Period on which Deutsche Bank released quarterly or year-end financial results. Such earnings-related announcements are an objective set of events to examine, which has been shown in the academic finance literature to impact securities' prices.⁷⁹ Exhibit 12 describes each of my selected event dates in detail and discusses how the observed Company-specific price reaction in Deutsche Bank stock is consistent with that expected in an efficient market.⁸⁰ Exhibit 12 also shows that Deutsche Bank stock returns in both the U.S. and German markets were quantitatively similar on each of the event dates examined, thereby demonstrating the informational efficiency of both markets. Thus, for the sake of brevity, the following discussion focuses on Deutsche Bank shares traded in the U.S.

50. Out of the fourteen event dates I examined, seven (*i.e.*, 50%) are associated with statistically significant Company-specific returns at or above the 95% confidence level (two statistically significant positive returns and five statistically significant negative returns).⁸¹ At the 95% level of confidence, a statistically significant return is expected to occur 5% of the time.

⁷⁸ See, *e.g.*, Fama, Eugene F., 1991, "Efficient Capital Markets: II," *The Journal of Finance*, Vol. 46, No. 5, pp. 1575–1617.

⁷⁹ See, *e.g.*, Ball, R., and P. Brown, 1968, "An Empirical Evaluation of Accounting Income Numbers," *Journal of Accounting Research*, pp. 159–78.

⁸⁰ For each event date, Exhibit 12 contains the associated stock price movement in both the U.S. and German markets, both observed and net of market and industry effects, as well as the confidence levels for each date.

⁸¹ The statistically significant positive impact dates are: January 30, 2020 (fourth-quarter/full-year 2020 earnings); and April 29, 2020 (first-quarter 2020 earnings). The statistically significant negative impact dates are July 27, 2017 (second-quarter 2017 earnings); February 2, 2018 (fourth-quarter/full-year 2017 earnings); October 24, 2018 (third-quarter 2018 earnings); October 30, 2019 (third-quarter 2019 earnings); and July 29, 2020 (second-quarter 2020 earnings).

Thus, one should expect a random sample of fourteen days to contain 0.7 days with a return that is statistically significant at the 95% confidence level. Given that my sample contains ten times as many statistically significant dates as should be expected from a randomly selected fourteen-day sample (at or above the 95% confidence level), my analysis confirms that Deutsche Bank's stock price typically reacted more strongly on event dates than on non-event dates.⁸²

51. Furthermore, although directionality may not be required to show general market efficiency for purposes of a securities class action,⁸³ my review of the news and analysts' reports demonstrates that the direction of the Company-specific returns observed on each event date were consistent with that expected in an efficient market, thereby providing additional evidence of efficiency. Specifically, the event dates on which predominantly *positive* Company-specific news reached the market are associated with statistically significant *positive* returns. The event dates on which predominantly *negative* Company-specific news reached the market are associated with statistically significant *negative* returns. On the event dates associated with a statistically insignificant Company-specific return,⁸⁴ the Company's financial results were

⁸² Moreover, statistical tests commonly used to conduct hypothesis tests for differences between proportions observed in categorical data strongly reject the null hypothesis that event dates and non-event dates are equally likely to be associated with statistically significant Company-specific returns (at or above the 95% confidence level). Specifically, both the "two-sample z-test" and "Fisher's exact test" reject the null hypothesis (p -value < 0.001) in favor of the alternative that there exists a higher probability of observing statistically significant Company-specific returns (at or above the 95% confidence level) on event dates during the Class Period. (See, e.g., Agresti, Alan, *An Introduction to Categorical Data Analysis*, John Wiley & Sons, Inc., 2nd Ed., 2007, Ch. 2 Contingency Tables, pp. 21–64.)

⁸³ See, e.g., *In re Petrobras Sec. Litig.*, 862 F.3d 250, 277 (2d Cir. 2017) (stating that district court finding that directionality was not required was "within the range of permissible decisions"); *Wilson v. LSB Indus.*, 2018 U.S. Dist. LEXIS 138832, at *40 (S.D.N.Y. Aug. 13, 2018) (lack of directionality analysis did not impair usefulness of market efficiency report).

⁸⁴ The statistically insignificant impact dates are: April 27, 2017 (first-quarter 2017 earnings); October 26, 2017 (third-quarter 2017 earnings); April 26, 2018 (first-quarter 2018 earnings); July 25, 2018 (second-quarter 2018 earnings); February 1, 2019 (fourth-quarter/full-year 2019)

generally in line with expectations, and/or conveyed a mix of offsetting positive and negative information, such that the insignificant price reaction is consistent with that expected in an efficient market. Thus, my event study finds that a strong cause-and-effect relationship existed between the information disclosed on the event dates and resulting stock price movements.

52. Based on the event study performed, I find that Deutsche Bank's stock price reflected the information disclosed to the market, and promptly responded to the disclosure of new, material, unexpected information, thereby supporting my conclusion that the market for Deutsche Bank stock was efficient throughout the Class Period.

F. Additional Factor 1: Market Capitalization

53. Courts have found that a large market capitalization (*i.e.*, the total value of a company's equity) is an indicator of market efficiency because "there is a greater incentive for stock purchasers to invest in more highly capitalized corporations."⁸⁵ I have discussed above the fact that Deutsche Bank stock exhibited a high degree of institutional ownership and the Company was widely followed by analysts. This is consistent with Deutsche Bank's sizeable market capitalization. During the Class Period, the Company's market capitalization was as high as \$41.54 billion in December 2017, and as low as \$11.33 billion in March 2020.⁸⁶

54. By comparison, at the beginning of the Class Period (*i.e.*, March 14, 2017): (i) the median market capitalization of the 2,392 companies listed on the NASDAQ was \$350.2 million; (ii) the median market capitalization of the 1,092 companies listed on the NYSE was \$3.4 billion; (iii) the median market capitalization of the 466 companies listed on the Xetra was \$214.1 million;

earnings); and July 24, 2019 (second-quarter 2019 earnings). April 26, 2019 (first-quarter 2019 earnings) is statistically significant at the 91.0% confidence level.

⁸⁵ *Krogman*, 202 F.R.D. at 478.

⁸⁶ See Exhibit 13.

and (iv) Deutsche Bank's market capitalization was greater than 97.7%, 88.0%, and 96.1% of NASDAQ-listed, NYSE-listed, and Xetra-listed stocks, respectively. Similarly, at the end of the Class Period (*i.e.*, September 18, 2020): (i) the median market capitalization of the 2,555 companies listed on the NASDAQ was \$366.7 million; (ii) the median market capitalization of the 1,295 companies listed on the NYSE was \$2.8 billion; (iii) the median market capitalization of the 476 companies listed on the Xetra was \$267.0 million; and (iv) Deutsche Bank's market capitalization was greater than 95.6%, 82.9%, and 93.2% of NASDAQ-listed, NYSE-listed, and Xetra-listed stocks, respectively. Accordingly, Deutsche Bank's high market capitalization during the Class Period weighs in favor of a finding of market efficiency.

G. Additional Factor 2: Bid/Ask Spread

55. The *Krogman* court described bid-ask spreads as “the difference between the price at which investors are willing to buy the stock and the price at which current stockholders are willing to sell their shares,” finding that “a large bid-ask spread is indicative of an inefficient market, because it suggests that the stock is too expensive to trade.”⁸⁷ As discussed above, the average and median bid/ask spreads on Deutsche Bank stock during the Class Period were comparable to those of randomly sampled stocks listed on the NYSE and the Xetra,⁸⁸ thereby supporting my conclusion that Deutsche Bank stock traded in an efficient market throughout the Class Period.

⁸⁷ *Krogman*, 202 F.R.D. at 478. *See also*, *Unger*, 401 F.3d 316 at 323.

⁸⁸ *Supra* at ¶38.

H. Additional Factor 3: Public Float

56. Courts have held that a large public float percentage (*i.e.*, the percentage of a security outstanding held by the public rather than insiders) may be an indicator of market efficiency.⁸⁹ During the Class Period, on average, there were approximately 2.05 billion Deutsche Bank shares outstanding, while insiders held approximately 2.9 million of these shares. Accordingly, the public float of Deutsche Bank stock was over 99% of shares outstanding during the Class Period. On a dollar basis, the public float of the Company was as high as \$40.15 billion in December 2017, and as low as \$12.34 billion in March 2020.⁹⁰ The fact that Deutsche Bank had a large public float percentage further supports my conclusion that the Company's stock traded in an efficient market throughout the Class Period.

ii. Comparison of U.S. and German Markets for Deutsche Bank Stock

57. During the Class Period, Deutsche Bank's stock was dual-listed on the NYSE and the Deutsche Börse Xetra ("Xetra") under the tickers "DB" and "DBK," respectively.⁹¹ As detailed below, strong evidence of price parity implies that the various trading centers for Deutsche Bank stock in the U.S. and in Germany were equally efficient during the Class Period. Thus, a demonstration of informational efficiency for the U.S. market directly evidences the informational efficiency of the German market for Deutsche Bank stock, and vice versa.

58. Xetra regular stock trading hours extend from 9:00 a.m. to 5:30 p.m. Central European Time ("CET"), Monday through Friday except for holidays recognized by the Deutsche

⁸⁹ *Unger*, 401 F.3d at 323; *Bell*, 422 F.3d at 313 n.10; *Krogman*, 202 F.R.D. at 478; *O'Neil*, 165 F.R.D. at 503.

⁹⁰ *See* Exhibit 14.

⁹¹ Source: Bloomberg. *See also* Deutsche Bank AG, SEC Form 20-F for year-end 2019, filed March 20, 2020, p. 96; Deutsche Bank AG, SEC Form 20-F for year-end 2016, filed March 20, 2017, p. 102.

Börse.^{92, 93} NYSE regular trading hours extend from 9:30 a.m. until 4:00 p.m. Eastern Time (“ET”), Monday through Friday except for holidays recognized by U.S. equity markets.⁹⁴ The time difference between Germany and New York during most of the year is six hours (with Germany being ahead), reduced to five hours during the periods: (1) from the second Sunday in March to the last Sunday in March; and (2) from the last Sunday in October to the first Sunday in November. Thus, during most of the calendar year, the overlap in trading hours between Xetra and the NYSE (when both Xetra and NYSE are open) is two hours, between 9:30 a.m. and 11:30 a.m. ET. During the periods: (1) from the second Sunday in March to the last Sunday in March; and (2) from the last Sunday in October to the first Sunday in November, the overlap in trading is three hours, between 9:30 a.m. and 12:30 p.m. ET. All times and dates in this Report are for the Eastern Time zone unless otherwise indicated.

59. Xetra is the electronic trading platform of the Frankfurt Stock Exchange, the largest stock exchange in Germany. Deutsche Börse AG, “an international exchange organisation and innovative market infrastructure provider,” operates the Frankfurt Stock Exchange.⁹⁵ Xetra “is the reference market for exchange-based trading of German shares and ETFs,” as “[m]ore than 90 per cent of overall share trading on all German exchanges takes place on the Xetra

⁹² <https://www.xetra.com/xetra-en/trading/trading-calendar-and-trading-hours>.

⁹³ Central European Time (“CET”) is Coordinated Universal Time (“UTC”) + 1.00 hour. Central European Summer Time (“CEST”) is UTC + 2.00 hours, and applies from the last Sunday of March to the last Sunday of October. (See <https://www.timeanddate.com/time/change/>.)

⁹⁴ For the Eastern Time zone, Eastern Standard Time (“EST”) is UTC – 5.00 hours. Eastern Daylight Time (“EDT”) is UTC – 4.00 hours, and extends from the second Sunday in March to the first Sunday in November. (*Ibid.*)

⁹⁵ <https://deutsche-boerse.com/dbg-en/our-company/deutsche-boerse-group>. See also <https://www.boerse-frankfurt.de/en/know-how/about/organization-of-the-stock-exchange>.

trading venue. Xetra holds a European market share of more than 70 per cent of trading in DAX®-listed stocks.”⁹⁶ According to Xetra:

[t]he price fixing on Xetra is conducted according to clearly defined and transparent rules. Trading participants who decide to trade through Xetra profit from highest liquidity and the fair prices of a major market place. Xetra is a truly international trading venue which shows in the structure of trading partic[i]pants. From the about 150 trading participants around 50 percent are located outside of Germany. In particular, institutional investors value the transparency and speed that Xetra provides, while still keeping trading costs low – but so do private investors.⁹⁷

As of September 18, 2020, there were 1,130 equities listed on Xetra and the total quoted market value was \$2.11 trillion.⁹⁸

60. The “proper conduct” of Germany’s stock exchanges, including Xetra, is monitored by the “Trading Surveillance Office” (“TSO”), an independent supervisory body. The TSO’s “aim is to protect the investor and to gain confidence in the market mechanisms.” The TSO “analy[z]es irregularities and notifies the [exchange] supervisory authorities and the management boards of the exchanges of its findings.”⁹⁹ The exchange supervisory authorities, to whom the TSO reports, “are administered by the federal states (*Länder*). The exchange supervisory authorities are vested with the powers needed to investigate stock exchange law matters and to issue orders intended to enforce proper exchange trading and the proper settlement of exchange transactions to stock exchanges and trading participants.”¹⁰⁰ The “Company Register” is the

⁹⁶ <https://www.xetra.com/xetra-en/trading/market-quality/reference-market>.

⁹⁷ <https://www.xetra.com/xetra-en/trading>.

⁹⁸ Source: Bloomberg (includes securities listed on Xetra and Xetra ETF).

⁹⁹ <https://www.deutsche-boerse.com/dbg-en/our-company/frankfurt-stock-exchange/supervisory-bodies>.

¹⁰⁰ https://www.bafin.de/EN/Aufsicht/BoersenMaerkte/Emittentenleitfaden/Modul1/Kapitel2/Kapitel2_3/kapitel2_3_node_en.html. See also https://www.bafin.de/EN/DieBaFin/AufgabenGeschichte/Wertpapieraufsicht/wertpapieraufsicht_node_en.html.

electronic filing system for “all important information required to be published about companies,”¹⁰¹ including a Company’s annual report, which is required by German law.¹⁰²

61. The NYSE is a leading global cash equity exchange, listing common stocks, preferred stocks and warrants, as well as structured products, such as capital securities and mandatory convertible securities.¹⁰³ The NYSE was the listing market for 2,297 and 2,188 public companies in March 2017 and September 2020, respectively.¹⁰⁴ The total market capitalization of all companies listed on the NYSE as of September 2020 was \$19.6 trillion,¹⁰⁵ and the median and mean market capitalization of companies listed on the NYSE was \$2.8 billion and \$15.4 billion, respectively.¹⁰⁶ The NYSE is a “national securities exchange” registered with the SEC under §6 of the Securities Exchange Act of 1934,¹⁰⁷ and “the [NYSE’s] current form of listing agreement generally seeks to achieve the following objectives:”¹⁰⁸

- Ensure timely disclosure of information that may affect security values or influence investment decisions, and in which shareholders, the public and the Exchange have a warrantable interest.
- Ensure frequent, regular and timely publication of financial reports prepared in accordance with generally accepted accounting principles.

¹⁰¹ <https://www.unternehmensregister.de/ureg/?submission=language&language=en>.

¹⁰² https://www.bafin.de/EN/Aufsicht/BoersenMaerkte/Emittentenleitfaden/Modul1/Kapitel4/Kapitel4_3/Kapitel4_3_1/kapitel4_3_1_node.html.

¹⁰³ Intercontinental Exchange, Inc., Form 10-K for 2017, filed February 7, 2018, p. 8.

¹⁰⁴ World Federation of Exchanges, Equity Market Highlights for March 2017 and September 2020 (available at <https://statistics.world-exchanges.org/PredefinedReport>).

¹⁰⁵ *Ibid.*

¹⁰⁶ Source: Bloomberg (includes companies whose primary listing of common stock is on the NYSE, excluding companies with no data available).

¹⁰⁷ <https://www.sec.gov/divisions/marketreg/mrexchanges.shtml>.

¹⁰⁸ <https://nyseguide.srorules.com/listed-company-manual>. (Select: Section 2 - Disclosure and Reporting Material Information.)

- Provide the Exchange with timely information to enable it to efficiently perform its function of maintaining an orderly market for the company's securities, to enable it to maintain necessary records and to allow it the opportunity to make comment as to certain matters before they become established facts.
- Preclude certain business practices not generally considered sound.¹⁰⁹

62. A security's listing on a national securities exchange such as the NYSE means that financial information about that company is readily available to investors, at a minimum, through the company's SEC filings, and that investors have access to trading prices and volumes throughout the trading day.¹¹⁰ Rules of the U. S. National Market System ("NMS") also require that investor orders in NYSE-listed securities be filled at the best price that can be executed immediately, even if that price is available in a different market.¹¹¹ Because listing on a national securities exchange brings together many thousands (or millions) of investors, trading prices reflect a consensus opinion as to a security's value.

¹⁰⁹ *Ibid.*

¹¹⁰ According to the Consolidated Tape Association's website (<https://www.ctaplan.com/index>):

The Consolidated Tape Association (CTA) oversees the dissemination of real-time trade and quote information in New York Stock Exchange LLC (Network A) and Bats, NYSE Arca, NYSE American and other regional exchange (Network B) listed securities. Since the late 1970s, all SEC-registered exchanges and market centers that trade Network A or Network B securities send their trades and quotes to a central consolidator where the Consolidated Tape System (CTS) and Consolidated Quote System (CQS) data streams are produced and distributed worldwide.

The current Participants include the Cboe BYX Exchange, Inc., Cboe BZX Exchange, Inc., Cboe EDGA Exchange, Inc., Cboe EDGX Exchange, Inc., Cboe Exchange, Inc., Financial Industry Regulatory Authority, Inc., Investors Exchange LLC, Long-Term Stock Exchange, Inc., MEMX LLC, MIAX Pearl, LLC, Nasdaq BX, Inc., Nasdaq ISE, LLC, Nasdaq PHLX LLC, Nasdaq Stock Market LLC, New York Stock Exchange LLC, NYSE American LLC, NYSE Arca, Inc., NYSE Chicago, Inc., and NYSE National, Inc. (collectively, the "Participants").

¹¹¹ Bodie, Zvi, Alex Kane, and Alan J. Marcus, *Investments*, McGraw-Hill/Irwin, 7th ed., 2008, Ch. 3, pp. 73, 74.

63. The market for securities trading on the NYSE is widely recognized as efficient. At least one authority has commented that:

at a minimum, there should be a presumption—probably conditional for class determination—that certain markets are developed and efficient for virtually all the securities traded there: the New York and American Stock Exchanges, the Chicago Board Options Exchange and the NASDAQ National Market System.¹¹²

Similarly, the court in *Cammer* stated:

some may concur with [Defendant’s] suggestion ... that companies listed on national stock exchanges or companies entitled to issue new securities using SEC Form S-3 would almost by definition involve stocks trading in an “open and developed” market.¹¹³

64. The fact that Deutsche Bank stock was listed and traded on two major exchanges, the NYSE and Xetra, supports my conclusion that the market for its stock was efficient throughout the Class Period.

65. Furthermore, the degree of relative market efficiency between the U.S. and German markets for Deutsche Bank stock is easily observed by examining contemporaneous transaction prices converted to U.S. dollars. A high level of intraday price parity between U.S. and German markets strongly demonstrates the involvement of informed investors and arbitrageurs (*i.e.*, the fundamental facilitators of market efficiency) seeking to profit from intraday price discrepancies. As shown in the following graph, Deutsche Bank’s stock price in Germany traded in lockstep with the U.S. market throughout the Class Period on a currency-adjusted basis.¹¹⁴ Indeed, the contemporaneous daily stock returns of Deutsche Bank’s U.S.- and German-traded shares

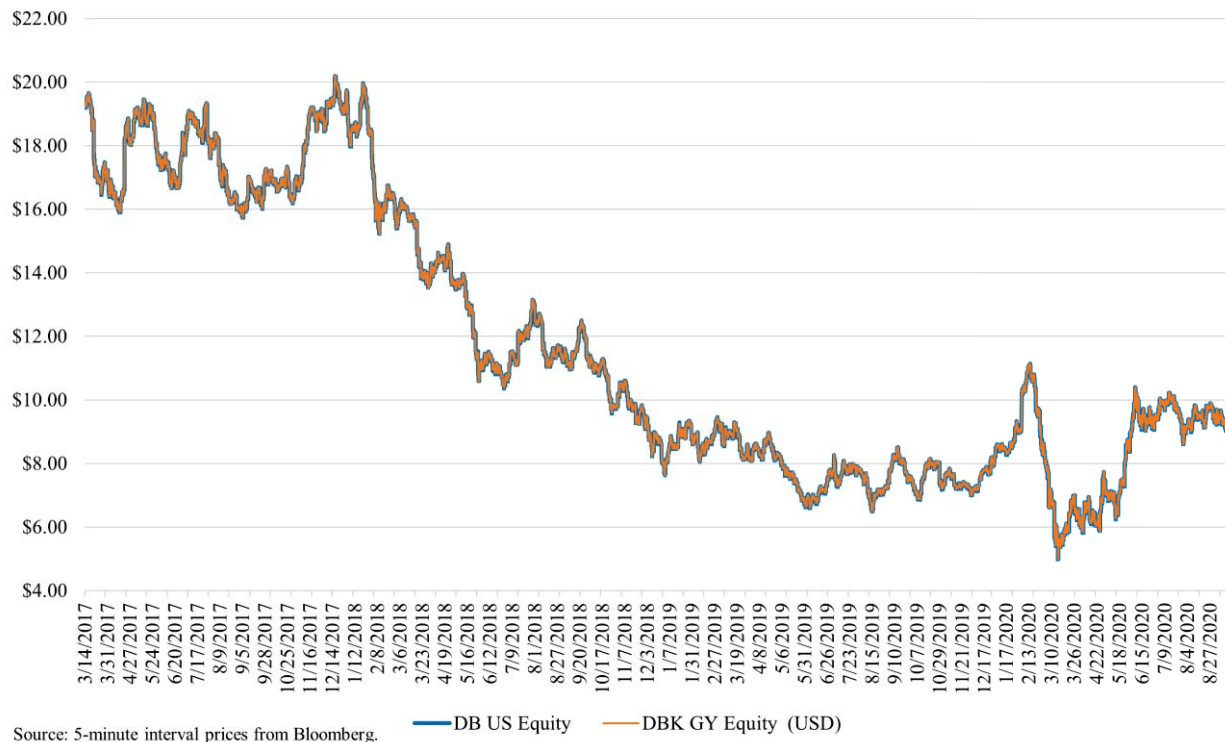
¹¹² Bromberg & Lowenfels, 4 Securities Fraud and Commodities Fraud, Section 8.6 (Aug. 1988) (quoted in *Cammer*, 711 F. Supp at 1292).

¹¹³ *Cammer*, 711 F. Supp. at 1276–77.

¹¹⁴ During the Class Period, the U.S. and German markets were simultaneously open from 9:30 AM to 11:30 AM ET.

exhibited a 99.9% correlation with each other.¹¹⁵

Intraday Prices of Deutsche Bank's U.S. and German Shares
(in U.S. Dollars)



66. As is evident from the intraday prices observed across the U.S. and German trading centers, cross-market arbitrage was efficient enough to ensure price parity throughout each day, thereby implying that the markets for Deutsche Bank stock in the U.S. and in Germany were equally efficient during the Class Period. Thus, my demonstration of informational efficiency for the U.S. market directly evidences the informational efficiency of the German market for Deutsche Bank stock, and vice versa.

¹¹⁵ Source: Bloomberg. Prices on the NYSE and Xetra are compared at 9:30 AM ET on each day. DBK's Euro price is converted into US dollars using the exchange rate at 9:30 AM ET on each day.

67. In sum, my analyses of the efficiency factors set forth above, as well as the high degree of price parity in both the U.S. and German markets, strongly demonstrate that the market for Deutsche Bank stock was informationally efficient in both the U.S. and Germany during the Class Period.

VII. Damages Can Be Measured on a Class-Wide Basis and in a Manner Consistent with Plaintiffs’ Theory of Liability

68. I have not, as of yet, been asked to provide an opinion on loss causation or to calculate Class-wide damages in this matter. I have been asked, however, to opine on whether damages under Section 10(b) can be calculated on a Class-wide basis for all purchases and/or acquisitions of Deutsche Bank stock during the Class Period in a manner consistent with Plaintiffs’ theory of liability. In what follows, I set forth the general economic framework for quantifying per-security damages on a Class-wide basis, which reflects methodologies I would propose to use if asked to calculate damages in this matter. Although damages, if any, for each individual Class member may vary, the methodologies for calculating damages described below would be commonly applicable to each Class member in this matter.

69. An investor incurs damages when a security is acquired at a price that is inflated as a result of false or misleading statements or omissions, provided that a later corrective disclosure and/or the materialization of a concealed risk causes the price of that security to decline.¹¹⁶ Price inflation in a security can be created by material misrepresentations and/or omissions on or before the date of purchase, which remain uncorrected in whole or in part at the time of purchase. Material misrepresentations and/or omissions may also “prevent[] preexisting

¹¹⁶ See, e.g., Gold, Kevin L., Eric Korman and Ahmer Nabi, “Federal Securities Acts and Areas of Expert Analysis,” *Litigation Services Handbook, The Role of the Financial Expert*, 6th ed., Ed. Roman L. Weil, Daniel G. Lentz, and Elizabeth A. Evans, John Wiley & Sons, Inc., 2017, Ch. 27, pp. 12–17.

inflation in a stock price from dissipating,” thereby “caus[ing] inflation not simply by *adding* it to a stock, but by maintaining it.”¹¹⁷ Damages for purchases during the Class Period may be mitigated if the security is sold before the price inflation is fully dissipated, given that the investor receives the benefit of any inflation remaining at the date of sale.¹¹⁸

70. Price inflation may be measured on a Class-wide basis by analyzing the change in a security’s price caused by a corrective disclosure and/or the materialization of a concealed risk.¹¹⁹ The decline in a security’s price in response to such events reflects the dissipation of price inflation created by earlier misrepresentations and/or omissions. An event study can be used to isolate Company-specific price movement caused by the revelation of true facts related to the alleged fraud from price movement caused by other factors. Other factors can include changes in market and industry conditions or the dissemination of material, non-fraud-related, Company-specific information. This event study analysis applies to all Class members, regardless of the extent to which the price movement is due to corrective disclosures and/or the materialization of a concealed risk. After isolating the price impact of the alleged misstatements

¹¹⁷ *In re Vivendi, S.A. Sec. Litig.*, 838 F.3d 223, 258 (2d Cir. 2016) (emphasis in original). Courts have further explained that “[t]here is no reason to draw any legal distinction between fraudulent statements that wrongfully prolong the presence of inflation in a stock price and fraudulent statements that initially introduce that inflation.” *Arkansas Teacher Ret. Sys. v. Goldman Sachs Grp., Inc.*, ---F.3d---, 2020 WL 1682772, at *10 (2d Cir. Apr. 7, 2020) (quoting *In re Vivendi, S.A. Sec. Litig.*, 838 F.3d at 259).

¹¹⁸ This general economic framework for calculating recoverable damages for a class of shareholders is often referred to as the “out-of-pocket measure of damages.” (*Supra* note 116.)

¹¹⁹ *Supra* note 116.

and omissions, one can estimate the price inflation due to the alleged fraud for each day during the Class Period, and on a Class-wide basis for each member of the Class.^{120, 121}

71. Once the daily levels of price inflation have been calculated throughout the Class Period, a Class member's actual trading activity in the security can be used to mechanically calculate damages on an individual basis. For each Class member, damages incurred on a security acquired during the Class Period and retained through the end of the Class Period are equal to the

¹²⁰ “Price impact can be shown either by an increase in price following a fraudulent public statement or a decrease in price following a revelation of the fraud.” *Erica P. John Fund, Inc. v. Halliburton Co.*, 718 F.3d 423, 434 (5th Cir. 2013), *vacated and remanded on other grounds*, *Halliburton II*, 134 S. Ct. 2398 (U.S. 2014).

¹²¹ *In re Pfizer, Inc. Sec. Litig.*, 819 F.3d 642, 649 (2d Cir. 2016) (internal citations omitted, emphasis in original):

Performing an event study can thus help an expert to determine at least two things. First, assuming that the defendant company fraudulently concealed information, the event study shows how much money the fraud caused shareholders to lose. Identifying residual returns on days when allegedly concealed information reached the market indicates that the supposedly withheld information caused the company's stock price to change. If the release of allegedly withheld information causes a stock price decrease, shareholders who purchased the defendant company's stock after the alleged fraud but before the revelation may have paid a higher price than they would have but for the defendant's fraudulent conduct — known as an “artificial[ly] inflat[ed]” price.

Second, the event study helps the expert “calculat[e] what the price of [the defendant company's] security would have been had the alleged wrongful conduct not occurred,” by estimating the amount of artificial inflation in the company's stock price over time. Just as the existence of a residual return on a day when the market discovers allegedly concealed information shows that the company's stock price was artificially inflated, the *size* of the residual return on such a day provides evidence of the *amount* by which concealing that particular information inflated the defendant company's stock. As a result, if concealed information reached the market through multiple corrective disclosures, the sum of the residual returns associated with those disclosures provides evidence about the amount of artificial inflation in the company's stock after the fraud but before those corrections. Thus, an expert using an event study can estimate the amount of artificial inflation in the defendant company's stock price when shareholders purchased their shares, which is equivalent to estimating the difference between what those investors should have paid for the shares but-for the alleged fraud, and what they actually paid.

amount of inflation at purchase. For a security acquired during the Class Period and sold later in the Class Period, damages are the price inflation at purchase minus the price inflation at sale.

Given my understanding of the Supreme Court's ruling in *Dura*,¹²² a security purchased during the Class Period and sold before the first corrective disclosure and/or the materialization of a concealed risk is ineligible for damages. Similarly, a security that is both purchased and sold between two consecutive disclosures of corrective information is ineligible for damages.

72. Finally, per-security damages should also incorporate the so-called "90-day lookback" provision of the Private Securities Litigation Reform Act of 1995,¹²³ which also can be applied on a Class-wide basis. This provision applies such that losses on securities purchased during the Class Period and held as of the close of the 90-day period subsequent to the Class Period (the "90-Day Lookback Period") cannot exceed the difference between the purchase price paid for the security and the average price of the security during the 90-Day Lookback Period. Losses on securities purchased during the Class Period and sold during the 90-Day Lookback Period cannot exceed the difference between the purchase price paid for the security and the rolling average price of the security during the portion of the 90-Day Lookback Period elapsed as of the date of sale. Section 10(b) damages incurred by purchasers of Deutsche Bank stock during the Class Period can be calculated on a Class-wide basis in this manner.

VIII. Conclusion

73. In summary, the market for Deutsche Bank stock was efficient throughout the Class Period. In addition, damages can be calculated for investors who purchased or otherwise

¹²² *Dura Pharms., Inc. v. Broudo*, 544 U.S. 336 (2005) ("*Dura*").

¹²³ 15 U.S.C. § 78u-4(e).

acquired Deutsche Bank stock during the Class Period using a method that is common to the Class and in a manner consistent with Plaintiffs' theory of liability.

74. My work in this matter is ongoing. My opinions in this Report are subject to refinement or revision based on analysis of new information which may be provided to me, including the opinions of other experts, receipt of additional documents and data, and based on further analysis of the data and materials described herein. I understand that discovery is ongoing. Should additional relevant information be provided to me, my opinions may be supplemented at a later date.

Executed on July 18, 2022, at Redwood City, California.

A handwritten signature in blue ink, appearing to read 'Zachary Nye', is written over a horizontal line.

Zachary Nye, Ph.D.

Appendix A: Description of Regression Analyses

75. For the purpose of examining market efficiency, I have conducted an event study to determine whether new, material, Company-specific information promptly caused a measurable stock price reaction after accounting for contemporaneous market and industry effects. In an effort to isolate Company-specific effects that influenced Deutsche Bank's stock price during the Class Period, I performed regression analyses to measure the relationship between Deutsche Bank stock returns and 1) changes in market-wide factors that would be expected to impact all stocks; and 2) changes in industry-wide factors that would be expected to impact stocks in the "Diversified Banks" industry. By measuring how Deutsche Bank's stock returns move in relation to an overall market index, and an industry index, I can also measure how it responds to Company-specific news.

76. For each event date, the "Control Period" used to estimate the regression equation is the calendar year immediately preceding the impact date (*i.e.*, the first trading day on which the information disclosed could have impacted the market price).^{124, 125} To be consistent with the

¹²⁴ Mitchell, Mark L. and Jeffry M. Netter, 1994, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer*, Vol. 49, pp. 545–90 at p. 568:

The market model is estimated with regression analysis. The estimation period for this market model equation typically ranges from 100 to 300 trading days preceding the event under study.

¹²⁵ MacKinlay, A. Craig, 1997, "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol. 35, pp. 13–39 at p. 15:

Given the selection of a normal performance model, the estimation window needs to be defined. The most common choice, when feasible, is using the period prior to the event window for the estimation window. For example, in an event study using daily data and the market model, the market model parameters could be estimated over the 120 days prior to the event. Generally the event period itself is not included in the estimation period to prevent the event from influencing the normal performance model parameter estimates.

academic literature, each of my Control Periods excludes the events under study.^{126, 127} Further, in order to mitigate the disclosure of the alleged fraud from contaminating my normal return measure, and in turn my estimate of abnormal return volatility, the Control Period excludes the corrective events alleged in the Complaint.^{128, 129, 130}

77. The market index used is the MSCI World Index, which “is a broad global equity index that represents large and mid-cap equity performance across [] 23 developed markets countries. It covers approximately 85% of the free float-adjusted market capitalization in each country.”¹³¹ This broad-based market index is commonly used by economists as a representation of the

¹²⁶ See Exhibit 12 for a list of all the events under study.

¹²⁷ See, e.g., MacKinlay, A. Craig, 1997, “Event Studies in Economics and Finance,” *Journal of Economic Literature*, Vol. 35, pp. 13–39 at p. 15; and Campbell, John Y., Andrew W. Lo, and A. Craig MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 1997, p. 152.

¹²⁸ Complaint, ¶¶178–204.

¹²⁹ MacKinlay, A. Craig, 1997, “Event Studies in Economics and Finance,” *Journal of Economic Literature*, Vol. 35, pp. 13–39 at p. 15:

Appraisal of the event’s impact requires a measure of the abnormal return. The abnormal return is the actual ex post return of the security over the event window minus the normal return of the firm over the event window. The normal return is defined as the expected return without conditioning on the event taking place.

¹³⁰ Campbell, John Y., Andrew W. Lo, and A. Craig MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 1997, p. 158:

It is typical for the estimation window and the event window not to overlap. This design provides estimators for the parameters of the normal return model which are not influenced by the event-related returns. Including the event window in the estimation of the normal model parameters could lead to the event returns having a large influence on the normal return measure. In this situation both the normal returns and the abnormal returns would reflect the impact of the event. This would be problematic since the methodology is built around the assumption that the event impact is captured by the abnormal returns.

¹³¹ <https://www.msci.com/our-solutions/indexes/developed-markets>. The “developed markets” countries include: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the U.S. (See *ibid.*)

overall market, which is theoretically required by the Capital Asset Pricing Model (“CAPM”), for which famed financial economist, William Sharpe, won a Nobel Prize.¹³²

78. In addition to market-wide factors, my regression analyses also measure the relationship between Deutsche Bank stock returns and changes in industry-wide factors that would be expected to impact all stocks in Deutsche Bank’s particular industry. In constructing the industry index, I considered: (i) companies identified as industry competitors in analyst reports published during the Class Period; (ii) companies identified by the Bloomberg Industry Classification System (BICS) as operating in the “Diversified Banks” industry; and (iii) companies identified as peers in Deutsche Bank’s SEC filings issued during the Class Period. The industry index used in this analysis is comprised of the companies Deutsche Bank considered to be its “Peer Group” (*i.e.*, “generally comparable business activities, comparable size and international presence”), as identified in its SEC filings throughout the Class Period.^{133, 134}

¹³² The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1990, Press Release (available at http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1990/press.html):

An important result is that the expected return on an asset is determined by the beta coefficient on the asset, which also measures the covariance between the return on the asset and the return on the market portfolio. ... The CAPM is considered the backbone of modern price theory for financial markets. It is also widely used in empirical analysis, so that the abundance of financial statistical data can be utilized systematically and efficiently. ... Along with Markowitz’ portfolio model, the CAPM has also become the framework in textbooks on financial economics throughout the world.

¹³³ Deutsche Bank AG, SEC Form 20-F, filed March 20, 2020, pp. 169, 170. *See also* Deutsche Bank AG, SEC Form 20-F, filed March 15, 2021, p. 178; Deutsche Bank AG, SEC Form 20-F, filed March 25, 2019, p. 163.

¹³⁴ *See* Exhibits 11C and 11F for the list of companies included in the industry index.

79. My estimated regression equations for the U.S. and German markets appear in Exhibits 11A and 11D, respectively. As indicated by the t -statistics corresponding to each index, Deutsche Bank stock returns exhibited a statistically significant association with both market index returns and residual industry index returns during the Class Period.¹³⁵ Exhibits 11B (U.S.) and 11E (Germany) show Deutsche Bank's expected (*i.e.*, "predicted") and residual (*i.e.*, "Company-specific") returns estimated from the regression models on each day of the Class Period. Expected returns are those changes in stock prices due to market and industry factors that change the values of all stocks in an economy (market effects) or in a particular industry (industry effects). Deutsche Bank's residual returns are a measure of the change in the stock price due to Company-specific events and are calculated as the difference between Deutsche Bank's actual return and its expected return.¹³⁶

¹³⁵ Residual industry index returns are the portions of daily returns on the industry index which are not explained by market effects, as determined from a regression of industry index returns on market index returns during the Control Period. The use of residual industry index returns rather than raw returns eliminates any statistical problems due to multicollinearity. (*See* Greene, William H., *Econometric Analysis*, Prentice Hall, 2012, 7th ed., Ch. 4, p. 89.)

¹³⁶ Exhibits 11B (U.S.) and 11E (Germany) also provide the confidence level for each day of the Class Period, which measures the statistical significance of Deutsche Bank's residual returns. The confidence level associated with a given Company-specific return is measured as one minus the " p -value" of that return, where the p -value represents the conditional probability of observing a Company-specific return. Thus, consistent with the standard frequently employed by social scientists, statistical significance in the context of securities litigation merely indicates that a given company-specific return is a relatively rare occurrence. (*See* Kaye, David H. and David A. Freedman, "Reference Guide on Statistics," in Federal Judicial Center, *Reference Manual on Scientific Evidence*, National Academies Press, 2011, 3rd ed., pp. 250–252: "Statistical significance is determined by comparing a p [*i.e.*, the probability of getting data as extreme as, or more extreme than, the actual data—given that the null hypothesis is true] to a preset value, called the significance level." Thus, statistical significance "is merely a label for a certain kind of p -value.")



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Education

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Finance

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- Dissertation: Macro-Augmented Volatility Forecasting.
- Research Interests: Market efficiency of underlying and derivative securities, volatility forecasting, risk management, financial econometrics, valuation and corporate finance.
- Teaching Experience: Corporate Finance, Investments, and Risk Management.

M.Sc. – London Business School

Finance

2004

London, England

- Earned distinction for Masters Thesis on the informational efficiency of credit-linked notes.

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Economics

2001

Princeton, New Jersey

Employment History

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Stanford Consulting Group, Inc.

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The Stanford Consulting Group, Inc. provides economic research and expert testimony for business litigation, as well as regulatory and legislative proceedings.

Responsibilities include:

- quantifying economic damages (e.g., present value of expected future earnings, price inflation, lost profits, unjust enrichment, reasonable royalties);
- enterprise, project, equity, debt, derivative-security and intellectual-property valuation;
- assessing the informational efficiency of financial securities;
- analyzing fairness opinions related to corporate mergers and acquisitions;
- econometric modeling and analysis;
- marginal cost analysis;
- preparing expert reports and declarations;
- providing deposition and trial testimony; and
- supporting counsel in preparation for cross examination of opposing experts.

Senior Consultant

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Summer 2009 – Summer 2015
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Associate
Stanford Consulting Group, Inc.

Summer 2004 – Summer 2005
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Mortgage Consultant
Woolwich PLC

Fall 2002 – Summer 2003
Oxford, UK

Trading Desk Specialist
Merrill Lynch, Defined Asset Funds

Fall 2001 – Summer 2002
Plainsboro, New Jersey

Academic Research

Nye, Zachary and Mark Washburn, 2013, “Macro-Augmented Volatility Forecasting,” *Western Decision Sciences Institute Proceedings*. Paper presented at the WDSI Annual Meeting, Long Beach, California, March 27, 2013. Winner of the 2013 Best Theoretical/Empirical Research Paper Awards.

Nye, Zachary and Philippe Jorion, 2009, “Macro-Augmented Volatility Forecasting,” Working Paper, University of California at Irvine.

Nye, Zachary and Timothy C. Johnson, 2005, “Market Efficiency's Hidden Teeth: An Unambiguous Test for Derivative Securities,” Working Paper, London Business School.

Testimony

Teresa Daskocz, et al. v. ALS Lien Services, et al., Superior Court of California, County of Contra Costa, Case No. C17-01486

Deposition	April 23, 2018
Deposition	March 8, 2022
Deposition	April 14, 2022
Trial	April 29, 2022

Paul Hayden, et al. v. Portola Pharmaceuticals, Inc., et al., United States District Court, Northern District of California, Case No. 3:20-cv-00367-VC

Deposition	March 30, 2022
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United States of America ex rel. Lori Morsell, et al. v. Symantec Corporation, United States District Court for the District of Columbia, Civil Action No. 12-cv-0800 (RC)

Deposition	March 13, 2019
Trial	March 22, 2022

United States of America ex rel. Tiffany Montcrieff, et al. v. Peripheral Vascular Associates, P.A., United States District Court for the Western District of Texas, San Antonio Division, Civil Action No. SA-17-CV-00317-XR

Deposition	July 31, 2020
Trial	February 14, 2022

In re Advance Auto Parts, Inc. Securities Litigation, United States District Court, District of Delaware, Case No. 1:18-CV-00212-RGA

Deposition	July 14, 2020
Deposition	September 30, 2021

In re Allergan PLC Securities Litigation, United States District Court, Southern District of New York, Civil Action No. 18-CV-12089-CM

Deposition	May 19, 2020
Deposition	September 27, 2021

Gabby Klein, et al. v. Altria Group, Inc., et al., United States District Court, Eastern District of Virginia, Richmond Division, Case No. 3:20-cv-00075-DJN

Deposition August 31, 2021

In re Tahoe Resources, Inc. Securities Litigation, United States District Court, District of Nevada, Case No. 2:17-cv-01868-RFB-NJK

Deposition August 4, 2021

Hawaii Structural Ironworkers Pension Trust Fund, et al. v. AMC Entertainment Holdings, Inc., et al., United States District Court, Southern District of New York, Case 1:18-cv-00299-AJN-SLC

Deposition July 9, 2020

Deposition July 28, 2021

In re Mylan N.V. Securities Litigation, United States District Court, Southern District of New York, Case No. 1:16-CV-07926 (JPO)

Deposition November 22, 2019

Deposition July 20, 2021

Oregon Laborers Employers Pension Trust Fund, et al. v. Maxar Technologies Inc., et al., United States District Court, District of Colorado, Case No. 1:19-cv-00124-WJM-SKC

Deposition May 28, 2021

Roei Azar, et al. v. Yelp, Inc., et al., United States District Court, Northern District of California, Case No. 3:18-cv-00400-EMC

Deposition March 2, 2021

Roofers' Pension Fund, et al. v. Joseph C. Papa, et al., United States District Court, District of New Jersey, Civil Action No. 2:16-cv-02805-MCA-LDW

Deposition April 2, 2019

Deposition January 14, 2021

Utah Retirement Systems, et al. v. Healthcare Services Group, Inc., et al., United States District Court, Eastern District of Pennsylvania, Case No. 2:19-cv-01227-ER

Deposition December 10, 2020

Matt Karinski, et al. v. Stamps.com, Inc., et al., United States District Court, Central District of California, Case No. 2:19-cv-01828-MWF-SK

Deposition August 14, 2020

Alexandre Pelletier, et al. v. Endo International PLC, et al., United States District Court, Eastern District of New York, Civil Action No. 2:17-cv-05114-MMB

Deposition July 27, 2020

In re Zillow Group, Inc. Securities Litigation, United States District Court, Western District of Washington at Seattle, Case No. 2:17-cv-01387-JCC

Deposition March 10, 2020

Joseph Prause, et al. v. TechnipFMC plc, et al., United States District Court, Southern District of Texas, Houston Division, Case No. 4:17-cv-02368

Deposition February 5, 2020

Deposition March 9, 2020

In re Quorum Health Securities Litigation, United States District Court, Middle District of Tennessee, Case No. 3:16-cv-02475

Deposition August 17, 2018

Deposition January 14, 2020

In re Snap Inc. Securities Litigation, United States District Court, Central District of California, Western Division,
Case No. 2:17-cv-03679-SVW-AGR

Deposition December 13, 2019

Jet Capital Master Fund, L.P., et al. v. American Realty Capital Properties, Inc., et al., United States District Court,
Southern District of New York, Case No. 1:15-cv-00307-AKH

Deposition July 26, 2019

City of Pontiac General Employees' Retirement System, et al. v. Dell Inc., et al., United States District Court,
Western District of Texas, Austin Division, Case No. 1:15-cv-00374-LY

Deposition April 19, 2017

Deposition November 6, 2018

Pirnik v. Fiat Chrysler Automobiles N.V., et al., United States District Court, Southern District of New York, Case
No. 1:15-CV-07199-JMF

Deposition February 2, 2018

Deposition September 13, 2018

Bradley Cooper, et al. v. Thoratec Corporation, et al., United States District Court, Northern District of California,
Oakland Division, Case No. 4:14-cv-00360-CW

Deposition March 6, 2018

L-3 Communications Corporation, et al. v. Serco, Inc., United States District Court for the Eastern District of
Virginia, Case No. 1:15-cv-701-GBL-JFA

Deposition October 22, 2015

Deposition October 18, 2017

In re Juno Therapeutics, Inc., United States District Court of Western District of Washington at Seattle, Case No.
C16-1069RSM

Deposition October 4, 2017

Brad Mauss, et al. v. NuVasive, Inc., et al., United States District Court, Southern District of California, Case No.:
13-cv-02005-JM

Deposition December 20, 2016

Deposition August 28, 2017

In re Akorn, Inc. Securities Litigation, United States District Court, Northern District of Illinois, Eastern Division,
Case No. 15-CV-01944

Deposition June 21, 2017

In re Ocwen Financial Corporation Securities Litigation, United States District Court, Southern District of Florida,
Case 14-81057-CIV-WPD

Deposition September 23, 2016

Deposition March 28, 2017

Stephen Calfo, et al. v. John P. Messina, Sr., et al., United States District Court, Southern District of New York,
Civil Action No. 15 Civ. 04010 (LGS)

Deposition January 5, 2017

In re EZCORP, Inc. Securities Litigation, United States District Court, Southern District of New York, Case No. 14-
cv-6834 (ALC)

Deposition October 14, 2016

Arthur Menaldi, et al. v. Och-Ziff Capital Management Group LLC, et al., United States District Court, Southern
District of New York, No. 14-CV-03251-JPO

Deposition October 3, 2016

Keith Thomas, et al. v. MagnaChip Semiconductor Corp., et al., United States District Court, Northern District of California, Case No. 3:14-cv-01160-JST

Deposition September 16, 2016

In re Rocket Fuel, Inc. Securities Litigation, United States District Court, Northern District of California, Oakland Division, Case No. 4:14-cv-03998-PJH

Deposition September 14, 2016

Barbara Strougo, Individually and on Behalf of All Others Similarly Situated v. Barclays PLC, et al., United States District Court, Southern District of New York, Case No. 14-cv-5797 (SAS)

Deposition August 11, 2015

Evidentiary Hearing November 5, 2015

Deposition June 16, 2016

In re Merck & Co., Inc. Securities, Derivative & “ERISA” Litigation, United States District Court, District of New Jersey, Case Numbers: 05-cv-5060; 07-cv-4021; 07-cv-4022; 07-cv-4023; 07-cv-4024; 07-cv-4546; 11-cv-6259; and 15-cv-518

Deposition December 6, 2013

Deposition October 1, 2015

Richard Thorpe and Darrel Weisheit, Individually and on Behalf of All Others Similarly Situated v. Walter Investment Management Corp., et al., United States District Court, Southern District of Florida, Case No. 1:14-cv-20880-UU

Deposition September 16, 2015

City of Austin Police Retirement System, *Individually and on Behalf of All Others Similarly Situated* v. Kinross Gold Corporation, et al., United States District Court, Southern District of New York, Civil Action No. 1:12-cv-01203-VEC-KNF

Deposition November 19, 2014

In re El Paso Partners, L.P. Derivative Litigation, Court of Chancery of the State of Delaware, C.A. No. 7141-CS

Deposition September 24, 2013

Trial November 12 and 13, 2014

L-3 Communications Corporation, et al. v. Jaxon Engineering & Maintenance, Inc., et al., United States District Court for the District of Colorado, Civil Action No. 10-cv-02868-MSK-KMT

Deposition August 7, 2014

Axa Corporate Solutions Assurance, et al. v. Honeywell International, Inc., et al., Superior Court of the State of Arizona in and for the County of Maricopa, No. CV2011-019334

Deposition February 24, 2014

In re Heckmann Corporation Securities Litigation, United States District Court for the District of Delaware, Case No. 1:10-cv-00378-LPS-MPT

Deposition November 9, 2012

Exhibit 2**Deutsche Bank AG****Document List***From Counsel*

Material	Document Date
Second Amended Class Action Complaint for Violations of the Federal Securities Laws	3/1/2021
Order on Defendants' Motion to Dismiss Second Amended Complaint	5/18/2022
Opinion and Order on Defendants' Motion to Dismiss Second Amended Complaint	6/13/2022
Third Amended Class Action Complaint for Violations of the Federal Securities Laws	6/30/2022

Obtained by Stanford Consulting Group, Inc.

Material	Document Date	Source
Academic journal articles, reference materials (e.g., books, web sites, and news articles), and court filings	Various	See footnotes to Nye Report
Analyst reports	3/2017 - 9/2020	Refinitiv Eikon; Bloomberg
Analyst ratings and price target data	3/2017 - 9/2020	Bloomberg
SEC filings for Deutsche Bank	3/2017 - 9/2020	Edgar Pro
News articles and conference call transcripts for Deutsche Bank	3/2017 - 9/2020	Factiva; Bloomberg; Internet
Daily closing bid & ask prices for Deutsche Bank stock and for sample companies on the NYSE and Xetra exchanges	3/2017 - 9/2020	Bloomberg
Total returns & market capitalization for comparables and/or competitors of Deutsche Bank	3/2016 - 12/2020	Bloomberg
Price, volume, dividend, shares outstanding data for Deutsche Bank	3/2016 - 12/2020	Bloomberg
Quarterly institutional and insider holdings data for Deutsche Bank	Q4-16 - Q4-20	Refinitiv Eikon; Bloomberg
Daily index levels for MXWO Index	3/2016 - 12/2020	Bloomberg
Short interest data for Deutsche Bank	3/2017 - 9/2020	Bloomberg
U.S. market short interest as a percentage of float data	3/2017 - 9/2020	Bloomberg
NASDAQ market maker activity data for Deutsche Bank	3/2017 - 9/2020	Bloomberg
Market capitalization data for NYSE, NASDAQ, and Xetra listed companies	3/2017 - 9/2020	Bloomberg
Intraday prices for Deutsche Bank stock on the NYSE and Xetra exchanges	3/2017 - 9/2020	Bloomberg

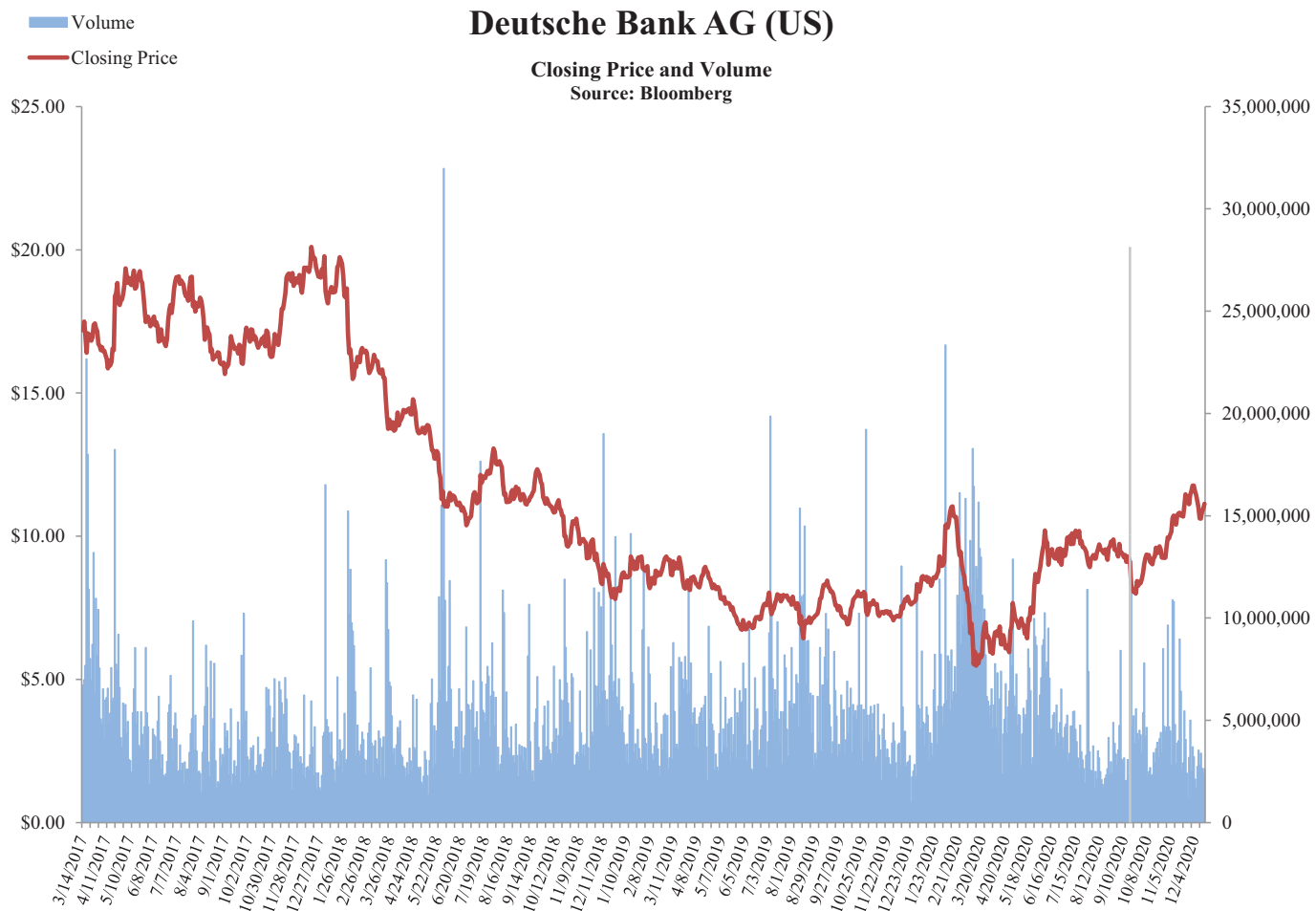
Exhibit 3A

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
3/14/2017	5,656,779	\$17.20	-\$0.32	-1.83%
3/15/2017	6,720,703	\$17.20	\$0.01	0.05%
3/16/2017	6,986,587	\$17.50	\$0.29	1.71%
3/17/2017	7,677,779	\$16.99	-\$0.51	-2.91%
3/20/2017	22,667,059	\$16.41	-\$0.58	-3.42%
3/21/2017	17,999,286	\$17.08	\$0.67	4.08%
3/22/2017	11,418,833	\$17.05	-\$0.03	-0.18%
3/23/2017	8,020,235	\$16.91	-\$0.14	-0.82%
3/24/2017	6,946,521	\$16.83	-\$0.08	-0.47%
3/27/2017	8,709,736	\$16.95	\$0.12	0.71%
3/28/2017	13,207,355	\$17.38	\$0.43	2.54%
3/29/2017	6,286,474	\$17.43	\$0.05	0.29%
3/30/2017	10,961,946	\$17.26	-\$0.17	-0.98%
3/31/2017	8,172,714	\$17.16	-\$0.10	-0.58%
4/3/2017	10,424,838	\$16.70	-\$0.46	-2.68%
4/4/2017	7,557,208	\$16.65	-\$0.05	-0.30%
4/5/2017	5,072,637	\$16.50	-\$0.15	-0.90%
4/6/2017	4,793,677	\$16.60	\$0.10	0.61%
4/7/2017	6,535,852	\$16.46	-\$0.14	-0.84%
4/10/2017	4,043,220	\$16.47	\$0.01	0.06%
4/11/2017	5,998,431	\$16.32	-\$0.15	-0.91%
4/12/2017	6,118,745	\$16.19	-\$0.13	-0.80%
4/13/2017	6,575,164	\$15.86	-\$0.33	-2.04%
4/17/2017	4,837,686	\$16.12	\$0.26	1.64%
4/18/2017	5,343,907	\$15.96	-\$0.16	-0.99%
4/19/2017	7,581,600	\$16.08	\$0.12	0.75%
4/20/2017	5,906,305	\$16.55	\$0.47	2.92%
4/21/2017	6,085,441	\$16.50	-\$0.05	-0.30%
4/24/2017	18,240,205	\$18.37	\$1.87	11.33%
4/25/2017	7,736,546	\$18.49	\$0.12	0.65%
4/26/2017	7,430,190	\$18.84	\$0.35	1.89%
4/27/2017	9,203,632	\$18.15	-\$0.69	-3.66%
4/28/2017	6,605,679	\$18.07	-\$0.08	-0.44%
5/1/2017	4,164,051	\$18.22	\$0.15	0.83%
5/2/2017	3,658,219	\$18.27	\$0.05	0.27%
5/3/2017	5,841,996	\$18.47	\$0.20	1.09%
5/4/2017	4,575,041	\$18.78	\$0.31	1.68%
5/5/2017	5,780,093	\$19.35	\$0.57	3.04%
5/8/2017	4,358,817	\$19.07	-\$0.28	-1.45%
5/9/2017	4,946,877	\$18.85	-\$0.22	-1.15%
5/10/2017	3,084,710	\$19.01	\$0.16	0.85%
5/11/2017	3,042,739	\$18.81	-\$0.20	-1.05%
5/12/2017	2,473,440	\$18.77	-\$0.04	-0.21%
5/15/2017	5,369,732	\$19.03	\$0.26	1.39%
5/16/2017	6,534,825	\$19.27	\$0.24	1.26%
5/17/2017	8,556,218	\$18.64	-\$0.63	-3.27%
5/18/2017	4,817,905	\$18.68	\$0.04	0.21%
5/19/2017	5,412,313	\$19.04	\$0.36	1.93%
5/22/2017	3,776,078	\$19.12	\$0.08	0.42%
5/23/2017	3,645,023	\$19.25	\$0.13	0.68%
5/24/2017	5,418,332	\$18.94	-\$0.31	-1.61%
5/25/2017	4,318,012	\$18.85	-\$0.09	-0.48%
5/26/2017	3,519,982	\$18.46	-\$0.39	-2.07%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
5/30/2017	4,690,600	\$17.97	-\$0.49	-2.65%
5/31/2017	8,561,433	\$17.48	-\$0.49	-2.73%
6/1/2017	5,372,119	\$17.65	\$0.17	0.97%
6/2/2017	4,691,288	\$17.66	\$0.01	0.06%
6/5/2017	1,833,403	\$17.50	-\$0.16	-0.91%
6/6/2017	3,065,470	\$17.33	-\$0.17	-0.97%
6/7/2017	3,078,257	\$17.46	\$0.13	0.75%
6/8/2017	4,580,104	\$17.57	\$0.11	0.63%
6/9/2017	4,285,232	\$17.67	\$0.10	0.57%
6/12/2017	4,204,899	\$17.36	-\$0.31	-1.75%
6/13/2017	3,027,493	\$17.47	\$0.11	0.63%
6/14/2017	4,971,891	\$17.34	-\$0.13	-0.74%
6/15/2017	6,185,528	\$16.79	-\$0.55	-3.17%
6/16/2017	3,985,220	\$16.82	\$0.03	0.18%
6/19/2017	2,589,172	\$17.22	\$0.40	2.38%
6/20/2017	3,314,485	\$16.85	-\$0.37	-2.15%
6/21/2017	2,323,818	\$16.90	\$0.05	0.30%
6/22/2017	2,204,605	\$16.74	-\$0.16	-0.95%
6/23/2017	2,375,066	\$16.64	-\$0.10	-0.60%
6/26/2017	2,991,819	\$16.88	\$0.24	1.44%
6/27/2017	5,388,251	\$17.51	\$0.63	3.73%
6/28/2017	5,762,957	\$17.91	\$0.40	2.28%
6/29/2017	7,194,387	\$18.07	\$0.16	0.89%
6/30/2017	4,101,619	\$17.79	-\$0.28	-1.55%
7/3/2017	3,012,055	\$18.15	\$0.36	2.02%
7/5/2017	4,733,872	\$18.63	\$0.48	2.64%
7/6/2017	5,356,198	\$18.89	\$0.26	1.40%
7/7/2017	4,585,739	\$19.05	\$0.16	0.85%
7/10/2017	2,483,601	\$18.97	-\$0.08	-0.42%
7/11/2017	2,537,127	\$19.07	\$0.10	0.53%
7/12/2017	3,803,241	\$18.81	-\$0.26	-1.36%
7/13/2017	2,500,387	\$18.93	\$0.12	0.64%
7/14/2017	2,914,726	\$18.86	-\$0.07	-0.37%
7/17/2017	1,910,762	\$18.79	-\$0.07	-0.37%
7/18/2017	2,971,905	\$18.50	-\$0.29	-1.54%
7/19/2017	2,544,450	\$18.38	-\$0.12	-0.65%
7/20/2017	2,625,850	\$18.46	\$0.08	0.44%
7/21/2017	2,562,218	\$18.22	-\$0.24	-1.30%
7/24/2017	3,435,879	\$18.67	\$0.45	2.47%
7/25/2017	4,355,953	\$19.04	\$0.37	1.98%
7/26/2017	5,085,995	\$19.06	\$0.02	0.11%
7/27/2017	9,867,698	\$18.03	-\$1.03	-5.40%
7/28/2017	3,561,231	\$18.19	\$0.16	0.89%
7/31/2017	5,255,416	\$17.84	-\$0.35	-1.92%
8/1/2017	3,513,644	\$18.13	\$0.29	1.63%
8/2/2017	2,347,759	\$18.01	-\$0.12	-0.66%
8/3/2017	2,516,419	\$18.06	\$0.05	0.28%
8/4/2017	2,405,413	\$18.33	\$0.27	1.50%
8/7/2017	1,454,649	\$18.23	-\$0.10	-0.55%
8/8/2017	3,444,581	\$17.99	-\$0.24	-1.32%
8/9/2017	4,724,097	\$17.58	-\$0.41	-2.28%
8/10/2017	5,684,011	\$16.86	-\$0.72	-4.10%
8/11/2017	8,678,632	\$17.05	\$0.19	1.13%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
8/14/2017	6,613,588	\$17.29	\$0.24	1.41%
8/15/2017	2,967,015	\$17.13	-\$0.16	-0.93%
8/16/2017	2,232,610	\$17.04	-\$0.09	-0.53%
8/17/2017	7,895,527	\$16.44	-\$0.60	-3.52%
8/18/2017	3,975,769	\$16.52	\$0.08	0.49%
8/21/2017	5,085,457	\$16.17	-\$0.35	-2.12%
8/22/2017	7,791,546	\$16.30	\$0.13	0.80%
8/23/2017	3,025,735	\$16.27	-\$0.03	-0.18%
8/24/2017	1,675,499	\$16.28	\$0.01	0.06%
8/25/2017	2,001,537	\$16.42	\$0.14	0.86%
8/28/2017	1,856,963	\$16.40	-\$0.02	-0.12%
8/29/2017	3,624,003	\$16.04	-\$0.36	-2.20%
8/30/2017	2,760,048	\$16.01	-\$0.03	-0.19%
8/31/2017	3,340,924	\$15.99	-\$0.02	-0.12%
9/1/2017	3,145,544	\$16.06	\$0.07	0.44%
9/5/2017	4,860,147	\$15.66	-\$0.40	-2.49%
9/6/2017	4,162,770	\$15.99	\$0.33	2.11%
9/7/2017	4,486,048	\$15.92	-\$0.07	-0.44%
9/8/2017	2,306,026	\$16.00	\$0.08	0.50%
9/11/2017	3,611,079	\$16.34	\$0.34	2.13%
9/12/2017	5,564,389	\$16.98	\$0.64	3.92%
9/13/2017	1,872,932	\$16.78	-\$0.20	-1.18%
9/14/2017	2,378,109	\$16.68	-\$0.10	-0.60%
9/15/2017	3,023,254	\$16.54	-\$0.14	-0.84%
9/18/2017	2,287,982	\$16.57	\$0.03	0.18%
9/19/2017	2,750,379	\$16.56	-\$0.01	-0.06%
9/20/2017	4,921,295	\$16.38	-\$0.18	-1.09%
9/21/2017	4,043,971	\$16.69	\$0.31	1.89%
9/22/2017	1,929,460	\$16.63	-\$0.06	-0.36%
9/25/2017	8,184,557	\$16.04	-\$0.59	-3.55%
9/26/2017	4,719,498	\$16.02	-\$0.02	-0.12%
9/27/2017	10,239,824	\$16.57	\$0.55	3.43%
9/28/2017	4,987,994	\$16.98	\$0.41	2.47%
9/29/2017	5,440,248	\$17.28	\$0.30	1.77%
10/2/2017	3,226,032	\$17.09	-\$0.19	-1.10%
10/3/2017	2,240,980	\$17.07	-\$0.02	-0.12%
10/4/2017	3,076,111	\$16.79	-\$0.28	-1.64%
10/5/2017	3,658,337	\$17.22	\$0.43	2.56%
10/6/2017	3,486,011	\$17.21	-\$0.01	-0.06%
10/9/2017	3,762,733	\$16.87	-\$0.34	-1.98%
10/10/2017	2,545,179	\$16.99	\$0.12	0.71%
10/11/2017	2,366,034	\$16.92	-\$0.07	-0.41%
10/12/2017	2,793,604	\$16.70	-\$0.22	-1.30%
10/13/2017	4,184,512	\$16.58	-\$0.12	-0.72%
10/16/2017	3,210,383	\$16.72	\$0.14	0.84%
10/17/2017	3,342,985	\$16.71	-\$0.01	-0.06%
10/18/2017	2,527,442	\$16.89	\$0.18	1.08%
10/19/2017	2,711,639	\$16.87	-\$0.02	-0.12%
10/20/2017	2,948,364	\$16.98	\$0.11	0.65%
10/23/2017	3,578,483	\$16.63	-\$0.35	-2.06%
10/24/2017	6,602,110	\$17.18	\$0.55	3.31%
10/25/2017	5,516,992	\$17.12	-\$0.06	-0.35%
10/26/2017	6,517,685	\$16.72	-\$0.40	-2.34%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
10/27/2017	5,699,360	\$16.32	-\$0.40	-2.39%
10/30/2017	4,409,737	\$16.26	-\$0.06	-0.37%
10/31/2017	2,182,041	\$16.27	\$0.01	0.06%
11/1/2017	5,113,053	\$16.56	\$0.29	1.78%
11/2/2017	7,033,737	\$17.06	\$0.50	3.02%
11/3/2017	2,506,835	\$16.82	-\$0.24	-1.41%
11/6/2017	3,684,374	\$16.83	\$0.01	0.06%
11/7/2017	3,516,231	\$16.68	-\$0.15	-0.89%
11/8/2017	6,894,185	\$17.04	\$0.36	2.16%
11/9/2017	6,494,907	\$17.41	\$0.37	2.17%
11/10/2017	5,854,228	\$17.94	\$0.53	3.04%
11/13/2017	4,344,535	\$17.93	-\$0.01	-0.06%
11/14/2017	5,284,869	\$18.19	\$0.26	1.45%
11/15/2017	7,096,531	\$18.48	\$0.29	1.59%
11/16/2017	6,044,910	\$19.04	\$0.56	3.03%
11/17/2017	3,859,249	\$19.13	\$0.09	0.47%
11/20/2017	3,458,840	\$19.17	\$0.04	0.21%
11/21/2017	3,398,252	\$19.01	-\$0.16	-0.83%
11/22/2017	2,619,489	\$18.91	-\$0.10	-0.53%
11/24/2017	1,581,614	\$19.19	\$0.28	1.48%
11/27/2017	3,510,142	\$18.74	-\$0.45	-2.34%
11/28/2017	4,284,913	\$18.88	\$0.14	0.75%
11/29/2017	4,208,477	\$19.00	\$0.12	0.64%
11/30/2017	3,463,117	\$18.86	-\$0.14	-0.74%
12/1/2017	3,862,635	\$18.98	\$0.12	0.64%
12/4/2017	2,915,543	\$19.12	\$0.14	0.74%
12/5/2017	3,220,436	\$18.76	-\$0.36	-1.88%
12/6/2017	2,881,867	\$18.50	-\$0.26	-1.39%
12/7/2017	2,271,566	\$18.85	\$0.35	1.89%
12/8/2017	6,232,265	\$19.38	\$0.53	2.81%
12/11/2017	2,150,558	\$19.30	-\$0.08	-0.41%
12/12/2017	2,679,733	\$19.38	\$0.08	0.41%
12/13/2017	2,734,276	\$19.33	-\$0.05	-0.26%
12/14/2017	2,568,147	\$19.23	-\$0.10	-0.52%
12/15/2017	3,309,523	\$19.43	\$0.20	1.04%
12/18/2017	5,953,034	\$20.10	\$0.67	3.45%
12/19/2017	3,695,668	\$19.85	-\$0.25	-1.24%
12/20/2017	2,264,486	\$19.71	-\$0.14	-0.71%
12/21/2017	4,692,654	\$19.70	-\$0.01	-0.05%
12/22/2017	2,434,194	\$19.38	-\$0.32	-1.62%
12/26/2017	1,618,616	\$19.23	-\$0.15	-0.77%
12/27/2017	2,429,018	\$19.06	-\$0.17	-0.88%
12/28/2017	1,704,921	\$19.10	\$0.04	0.21%
12/29/2017	1,548,660	\$19.03	-\$0.07	-0.37%
1/2/2018	2,307,430	\$19.33	\$0.30	1.58%
1/3/2018	4,234,959	\$19.16	-\$0.17	-0.88%
1/4/2018	4,409,506	\$19.77	\$0.61	3.18%
1/5/2018	16,517,352	\$18.55	-\$1.22	-6.17%
1/8/2018	5,030,690	\$18.30	-\$0.25	-1.35%
1/9/2018	4,691,650	\$18.13	-\$0.17	-0.93%
1/10/2018	4,391,004	\$18.50	\$0.37	2.04%
1/11/2018	3,280,164	\$18.56	\$0.06	0.32%
1/12/2018	4,427,248	\$18.70	\$0.14	0.75%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
1/16/2018	3,107,420	\$18.51	-\$0.19	-1.02%
1/17/2018	2,585,030	\$18.52	\$0.01	0.05%
1/18/2018	1,964,642	\$18.53	\$0.01	0.05%
1/19/2018	2,981,295	\$18.78	\$0.25	1.35%
1/22/2018	7,125,139	\$19.39	\$0.61	3.25%
1/23/2018	2,752,964	\$19.47	\$0.08	0.41%
1/24/2018	4,057,264	\$19.74	\$0.27	1.39%
1/25/2018	3,504,754	\$19.64	-\$0.10	-0.51%
1/26/2018	2,386,164	\$19.51	-\$0.13	-0.66%
1/29/2018	3,576,038	\$19.10	-\$0.41	-2.10%
1/30/2018	5,353,625	\$18.38	-\$0.72	-3.77%
1/31/2018	2,886,969	\$18.34	-\$0.04	-0.22%
2/1/2018	3,088,457	\$18.65	\$0.31	1.69%
2/2/2018	15,244,442	\$17.09	-\$1.56	-8.36%
2/5/2018	10,187,647	\$16.39	-\$0.70	-4.10%
2/6/2018	12,390,030	\$16.52	\$0.13	0.79%
2/7/2018	9,774,730	\$16.09	-\$0.43	-2.60%
2/8/2018	9,365,868	\$15.49	-\$0.60	-3.73%
2/9/2018	8,654,186	\$15.58	\$0.09	0.58%
2/12/2018	6,412,900	\$16.01	\$0.43	2.76%
2/13/2018	3,246,856	\$15.90	-\$0.11	-0.69%
2/14/2018	4,770,238	\$16.26	\$0.36	2.26%
2/15/2018	3,500,046	\$16.11	-\$0.15	-0.92%
2/16/2018	3,255,679	\$16.08	-\$0.03	-0.19%
2/20/2018	3,810,354	\$16.46	\$0.38	2.36%
2/21/2018	4,420,454	\$16.57	\$0.11	0.67%
2/22/2018	4,052,872	\$16.43	-\$0.14	-0.84%
2/23/2018	3,095,091	\$16.43	\$0.00	0.00%
2/26/2018	2,322,948	\$16.48	\$0.05	0.30%
2/27/2018	3,047,272	\$16.40	-\$0.08	-0.49%
2/28/2018	4,372,948	\$15.94	-\$0.46	-2.80%
3/1/2018	4,869,611	\$15.70	-\$0.24	-1.51%
3/2/2018	7,563,205	\$15.79	\$0.09	0.57%
3/5/2018	3,886,875	\$15.89	\$0.10	0.63%
3/6/2018	2,405,897	\$16.06	\$0.17	1.07%
3/7/2018	3,755,075	\$16.33	\$0.27	1.68%
3/8/2018	4,012,712	\$16.18	-\$0.15	-0.92%
3/9/2018	3,114,104	\$16.12	-\$0.06	-0.37%
3/12/2018	2,833,541	\$16.11	-\$0.01	-0.06%
3/13/2018	4,476,419	\$15.79	-\$0.32	-1.99%
3/14/2018	4,117,305	\$15.70	-\$0.09	-0.57%
3/15/2018	2,187,942	\$15.70	\$0.00	0.00%
3/16/2018	3,689,009	\$15.82	\$0.12	0.76%
3/19/2018	4,187,677	\$15.54	-\$0.28	-1.77%
3/20/2018	2,196,611	\$15.52	-\$0.02	-0.13%
3/21/2018	12,846,137	\$14.79	-\$0.73	-4.70%
3/22/2018	11,721,272	\$14.19	-\$0.60	-4.06%
3/23/2018	9,433,819	\$13.75	-\$0.44	-3.10%
3/26/2018	6,873,130	\$14.07	\$0.32	2.33%
3/27/2018	6,663,501	\$13.77	-\$0.30	-2.13%
3/28/2018	5,219,893	\$13.76	-\$0.01	-0.07%
3/29/2018	3,322,869	\$13.98	\$0.22	1.60%
4/2/2018	3,621,728	\$13.68	-\$0.30	-2.15%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
4/3/2018	2,799,274	\$13.72	\$0.04	0.29%
4/4/2018	3,796,556	\$13.88	\$0.16	1.17%
4/5/2018	4,654,826	\$14.32	\$0.44	3.17%
4/6/2018	4,373,961	\$13.87	-\$0.45	-3.14%
4/9/2018	4,976,757	\$14.01	\$0.14	1.01%
4/10/2018	3,298,673	\$14.08	\$0.07	0.50%
4/11/2018	3,200,558	\$14.19	\$0.11	0.78%
4/12/2018	2,760,115	\$14.41	\$0.22	1.55%
4/13/2018	2,673,098	\$14.38	-\$0.03	-0.21%
4/16/2018	2,210,430	\$14.33	-\$0.05	-0.35%
4/17/2018	2,934,047	\$14.38	\$0.05	0.35%
4/18/2018	2,328,317	\$14.44	\$0.06	0.42%
4/19/2018	3,643,570	\$14.46	\$0.02	0.14%
4/20/2018	3,019,991	\$14.26	-\$0.20	-1.38%
4/23/2018	2,482,581	\$14.25	-\$0.01	-0.07%
4/24/2018	6,236,339	\$14.78	\$0.53	3.72%
4/25/2018	3,657,488	\$14.60	-\$0.18	-1.22%
4/26/2018	3,544,648	\$14.34	-\$0.26	-1.78%
4/27/2018	6,033,783	\$13.89	-\$0.45	-3.14%
4/30/2018	2,706,501	\$13.66	-\$0.23	-1.66%
5/1/2018	2,588,502	\$13.59	-\$0.07	-0.51%
5/2/2018	2,712,797	\$13.63	\$0.04	0.29%
5/3/2018	1,968,925	\$13.63	\$0.00	0.00%
5/4/2018	1,787,218	\$13.78	\$0.15	1.10%
5/7/2018	2,265,617	\$13.78	\$0.00	0.00%
5/8/2018	3,488,874	\$13.59	-\$0.19	-1.38%
5/9/2018	3,072,798	\$13.78	\$0.19	1.40%
5/10/2018	2,297,397	\$13.88	\$0.10	0.73%
5/11/2018	1,324,874	\$13.86	-\$0.02	-0.14%
5/14/2018	3,035,493	\$13.65	-\$0.21	-1.52%
5/15/2018	5,819,923	\$13.29	-\$0.36	-2.64%
5/16/2018	7,021,184	\$13.00	-\$0.29	-2.18%
5/17/2018	2,618,935	\$12.99	-\$0.01	-0.08%
5/18/2018	4,731,074	\$12.71	-\$0.28	-2.16%
5/21/2018	2,852,541	\$12.71	\$0.00	0.00%
5/22/2018	4,484,437	\$12.97	\$0.26	2.05%
5/23/2018	5,851,120	\$12.88	-\$0.09	-0.69%
5/24/2018	11,040,657	\$12.25	-\$0.63	-4.89%
5/25/2018	6,440,505	\$12.05	-\$0.20	-1.63%
5/29/2018	15,515,590	\$11.30	-\$0.75	-6.22%
5/30/2018	10,298,173	\$11.57	\$0.27	2.39%
5/31/2018	31,985,982	\$11.08	-\$0.49	-4.24%
6/1/2018	10,876,930	\$11.04	-\$0.04	-0.36%
6/4/2018	5,858,035	\$11.21	\$0.17	1.54%
6/5/2018	5,919,045	\$11.03	-\$0.18	-1.61%
6/6/2018	7,633,411	\$11.35	\$0.32	2.90%
6/7/2018	11,834,230	\$11.51	\$0.16	1.41%
6/8/2018	6,519,302	\$11.25	-\$0.26	-2.26%
6/11/2018	3,980,919	\$11.43	\$0.18	1.60%
6/12/2018	3,140,139	\$11.41	-\$0.02	-0.17%
6/13/2018	3,601,514	\$11.37	-\$0.04	-0.35%
6/14/2018	4,671,331	\$11.22	-\$0.15	-1.32%
6/15/2018	4,681,880	\$11.10	-\$0.12	-1.07%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
6/18/2018	4,495,085	\$11.08	-\$0.02	-0.18%
6/19/2018	6,547,623	\$11.17	\$0.09	0.81%
6/20/2018	2,359,263	\$11.08	-\$0.09	-0.81%
6/21/2018	5,438,427	\$10.89	-\$0.19	-1.71%
6/22/2018	3,469,309	\$11.01	\$0.12	1.10%
6/25/2018	3,652,269	\$10.89	-\$0.12	-1.09%
6/26/2018	4,243,456	\$10.78	-\$0.11	-1.01%
6/27/2018	9,562,158	\$10.38	-\$0.40	-3.71%
6/28/2018	5,782,773	\$10.47	\$0.09	0.87%
6/29/2018	5,751,155	\$10.62	\$0.15	1.43%
7/2/2018	5,513,018	\$10.64	\$0.02	0.19%
7/3/2018	2,371,812	\$10.70	\$0.06	0.56%
7/5/2018	5,834,326	\$11.13	\$0.43	4.02%
7/6/2018	6,942,805	\$11.46	\$0.33	2.96%
7/9/2018	4,405,445	\$11.54	\$0.08	0.70%
7/10/2018	4,638,150	\$11.43	-\$0.11	-0.95%
7/11/2018	5,423,179	\$11.15	-\$0.28	-2.45%
7/12/2018	4,057,714	\$11.20	\$0.05	0.45%
7/13/2018	2,725,509	\$11.24	\$0.04	0.36%
7/16/2018	17,667,654	\$12.14	\$0.90	8.01%
7/17/2018	6,890,436	\$11.87	-\$0.27	-2.22%
7/18/2018	5,494,030	\$12.08	\$0.21	1.77%
7/19/2018	5,354,761	\$12.02	-\$0.06	-0.50%
7/20/2018	4,882,821	\$12.03	\$0.01	0.08%
7/23/2018	6,767,348	\$12.18	\$0.15	1.25%
7/24/2018	7,631,518	\$12.28	\$0.10	0.82%
7/25/2018	7,156,939	\$12.18	-\$0.10	-0.81%
7/26/2018	4,124,105	\$12.20	\$0.02	0.16%
7/27/2018	6,186,455	\$12.42	\$0.22	1.80%
7/30/2018	8,793,337	\$12.79	\$0.37	2.98%
7/31/2018	6,397,500	\$13.06	\$0.27	2.11%
8/1/2018	4,698,460	\$12.95	-\$0.11	-0.84%
8/2/2018	6,120,150	\$12.54	-\$0.41	-3.17%
8/3/2018	2,517,226	\$12.50	-\$0.04	-0.32%
8/6/2018	3,699,378	\$12.52	\$0.02	0.16%
8/7/2018	2,495,338	\$12.62	\$0.10	0.80%
8/8/2018	2,841,304	\$12.52	-\$0.10	-0.79%
8/9/2018	3,288,676	\$12.40	-\$0.12	-0.96%
8/10/2018	11,367,054	\$11.82	-\$0.58	-4.68%
8/13/2018	10,260,292	\$11.45	-\$0.37	-3.13%
8/14/2018	4,532,518	\$11.49	\$0.04	0.35%
8/15/2018	6,391,745	\$11.19	-\$0.30	-2.61%
8/16/2018	4,143,178	\$11.21	\$0.02	0.18%
8/17/2018	3,637,275	\$11.20	-\$0.01	-0.09%
8/20/2018	3,377,616	\$11.22	\$0.02	0.18%
8/21/2018	4,689,818	\$11.54	\$0.32	2.85%
8/22/2018	3,145,408	\$11.61	\$0.07	0.61%
8/23/2018	3,277,499	\$11.30	-\$0.31	-2.67%
8/24/2018	2,881,530	\$11.39	\$0.09	0.80%
8/27/2018	4,817,064	\$11.73	\$0.34	2.99%
8/28/2018	3,292,857	\$11.55	-\$0.18	-1.53%
8/29/2018	2,215,250	\$11.66	\$0.11	0.95%
8/30/2018	3,809,796	\$11.42	-\$0.24	-2.06%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
8/31/2018	3,254,155	\$11.26	-\$0.16	-1.40%
9/4/2018	3,729,902	\$11.42	\$0.16	1.42%
9/5/2018	2,962,880	\$11.47	\$0.05	0.44%
9/6/2018	3,689,899	\$11.38	-\$0.09	-0.78%
9/7/2018	3,632,523	\$11.13	-\$0.25	-2.20%
9/10/2018	2,486,262	\$11.11	-\$0.02	-0.18%
9/11/2018	8,142,972	\$11.24	\$0.13	1.17%
9/12/2018	10,676,690	\$11.24	\$0.00	0.00%
9/13/2018	3,963,386	\$11.36	\$0.12	1.07%
9/14/2018	2,203,662	\$11.40	\$0.04	0.35%
9/17/2018	2,540,655	\$11.51	\$0.11	0.96%
9/18/2018	1,990,386	\$11.58	\$0.07	0.61%
9/19/2018	4,896,780	\$11.95	\$0.37	3.20%
9/20/2018	5,555,604	\$12.25	\$0.30	2.51%
9/21/2018	7,139,522	\$12.34	\$0.09	0.73%
9/24/2018	3,688,369	\$12.24	-\$0.10	-0.81%
9/25/2018	2,886,826	\$12.15	-\$0.09	-0.74%
9/26/2018	3,046,212	\$11.90	-\$0.25	-2.06%
9/27/2018	3,011,933	\$11.81	-\$0.09	-0.76%
9/28/2018	4,750,714	\$11.36	-\$0.45	-3.81%
10/1/2018	5,698,148	\$11.25	-\$0.11	-0.97%
10/2/2018	3,377,515	\$11.13	-\$0.12	-1.07%
10/3/2018	3,722,622	\$11.32	\$0.19	1.71%
10/4/2018	5,948,924	\$11.20	-\$0.12	-1.06%
10/5/2018	3,559,501	\$11.12	-\$0.08	-0.71%
10/8/2018	3,375,472	\$11.05	-\$0.07	-0.63%
10/9/2018	2,949,774	\$11.03	-\$0.02	-0.18%
10/10/2018	3,928,155	\$10.92	-\$0.11	-1.00%
10/11/2018	7,650,150	\$10.83	-\$0.09	-0.82%
10/12/2018	4,014,697	\$10.84	\$0.01	0.09%
10/15/2018	4,591,591	\$11.03	\$0.19	1.75%
10/16/2018	3,349,342	\$11.16	\$0.13	1.18%
10/17/2018	4,259,212	\$11.26	\$0.10	0.90%
10/18/2018	6,984,112	\$10.97	-\$0.29	-2.58%
10/19/2018	6,011,590	\$10.92	-\$0.05	-0.46%
10/22/2018	4,188,080	\$10.72	-\$0.20	-1.83%
10/23/2018	5,965,353	\$10.70	-\$0.02	-0.19%
10/24/2018	11,900,212	\$10.00	-\$0.70	-6.54%
10/25/2018	8,577,688	\$10.00	\$0.00	0.00%
10/26/2018	6,821,714	\$9.67	-\$0.33	-3.30%
10/29/2018	5,843,794	\$9.64	-\$0.03	-0.31%
10/30/2018	4,905,737	\$9.74	\$0.10	1.04%
10/31/2018	4,577,173	\$9.77	\$0.03	0.31%
11/1/2018	7,276,922	\$10.25	\$0.48	4.91%
11/2/2018	7,081,327	\$10.52	\$0.27	2.63%
11/5/2018	2,808,929	\$10.46	-\$0.06	-0.57%
11/6/2018	2,828,249	\$10.44	-\$0.02	-0.19%
11/7/2018	3,320,802	\$10.61	\$0.17	1.63%
11/8/2018	3,444,634	\$10.34	-\$0.27	-2.54%
11/9/2018	3,218,834	\$10.12	-\$0.22	-2.13%
11/12/2018	6,437,300	\$9.73	-\$0.39	-3.85%
11/13/2018	4,386,819	\$9.86	\$0.13	1.34%
11/14/2018	3,322,604	\$9.87	\$0.01	0.10%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
11/15/2018	3,794,008	\$9.90	\$0.03	0.30%
11/16/2018	3,238,575	\$9.81	-\$0.09	-0.91%
11/19/2018	3,843,191	\$9.78	-\$0.03	-0.31%
11/20/2018	9,329,986	\$9.23	-\$0.55	-5.62%
11/21/2018	3,658,572	\$9.44	\$0.21	2.28%
11/23/2018	2,568,397	\$9.25	-\$0.19	-2.01%
11/26/2018	8,449,284	\$9.73	\$0.48	5.19%
11/27/2018	4,420,484	\$9.84	\$0.11	1.13%
11/28/2018	4,237,578	\$9.89	\$0.05	0.51%
11/29/2018	11,467,976	\$9.42	-\$0.47	-4.75%
11/30/2018	6,698,014	\$9.16	-\$0.26	-2.76%
12/3/2018	5,612,786	\$9.39	\$0.23	2.51%
12/4/2018	6,669,961	\$9.06	-\$0.33	-3.51%
12/6/2018	11,253,905	\$8.90	-\$0.16	-1.77%
12/7/2018	5,797,588	\$8.73	-\$0.17	-1.91%
12/10/2018	10,546,315	\$8.38	-\$0.35	-4.01%
12/11/2018	6,399,238	\$8.33	-\$0.05	-0.60%
12/12/2018	19,017,762	\$9.03	\$0.70	8.40%
12/13/2018	6,442,935	\$8.87	-\$0.16	-1.77%
12/14/2018	4,706,078	\$8.80	-\$0.07	-0.79%
12/17/2018	6,019,643	\$8.60	-\$0.20	-2.27%
12/18/2018	4,683,274	\$8.69	\$0.09	1.05%
12/19/2018	7,190,508	\$8.37	-\$0.32	-3.68%
12/20/2018	11,052,399	\$8.06	-\$0.31	-3.70%
12/21/2018	8,671,155	\$7.87	-\$0.19	-2.36%
12/24/2018	6,395,506	\$7.91	\$0.04	0.51%
12/26/2018	6,902,348	\$8.16	\$0.25	3.16%
12/27/2018	13,975,826	\$7.81	-\$0.35	-4.29%
12/28/2018	6,150,623	\$8.05	\$0.24	3.07%
12/31/2018	5,801,725	\$8.15	\$0.10	1.24%
1/2/2019	7,039,097	\$8.20	\$0.05	0.61%
1/3/2019	5,471,166	\$8.09	-\$0.11	-1.34%
1/4/2019	4,845,075	\$8.52	\$0.43	5.32%
1/7/2019	5,661,706	\$8.70	\$0.18	2.11%
1/8/2019	4,386,276	\$8.74	\$0.04	0.46%
1/9/2019	3,805,689	\$8.56	-\$0.18	-2.06%
1/10/2019	2,943,288	\$8.61	\$0.05	0.58%
1/11/2019	3,844,614	\$8.56	-\$0.05	-0.58%
1/14/2019	2,845,854	\$8.58	\$0.02	0.23%
1/15/2019	5,264,244	\$8.63	\$0.05	0.58%
1/16/2019	14,131,453	\$9.29	\$0.66	7.65%
1/17/2019	7,338,544	\$8.92	-\$0.37	-3.98%
1/18/2019	6,793,297	\$9.14	\$0.22	2.47%
1/22/2019	3,407,144	\$8.85	-\$0.29	-3.17%
1/23/2019	3,862,667	\$9.05	\$0.20	2.26%
1/24/2019	3,007,217	\$8.86	-\$0.19	-2.10%
1/25/2019	4,561,756	\$9.24	\$0.38	4.29%
1/28/2019	3,612,894	\$9.27	\$0.03	0.32%
1/29/2019	3,155,016	\$9.23	-\$0.04	-0.43%
1/30/2019	2,826,112	\$9.29	\$0.06	0.65%
1/31/2019	9,427,641	\$8.88	-\$0.41	-4.41%
2/1/2019	12,559,031	\$8.85	-\$0.03	-0.34%
2/4/2019	4,122,294	\$8.80	-\$0.05	-0.56%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
2/5/2019	3,872,116	\$8.90	\$0.10	1.14%
2/6/2019	2,495,584	\$8.95	\$0.05	0.56%
2/7/2019	8,587,370	\$8.36	-\$0.59	-6.59%
2/8/2019	7,256,207	\$8.19	-\$0.17	-2.03%
2/11/2019	4,371,489	\$8.32	\$0.13	1.59%
2/12/2019	3,353,687	\$8.54	\$0.22	2.64%
2/13/2019	3,023,558	\$8.54	\$0.00	0.00%
2/14/2019	3,756,311	\$8.34	-\$0.20	-2.34%
2/15/2019	5,861,354	\$8.80	\$0.46	5.52%
2/19/2019	4,877,012	\$8.61	-\$0.19	-2.16%
2/20/2019	3,601,465	\$8.74	\$0.13	1.51%
2/21/2019	2,760,705	\$8.66	-\$0.08	-0.92%
2/22/2019	2,297,182	\$8.65	-\$0.01	-0.12%
2/25/2019	4,324,895	\$8.77	\$0.12	1.39%
2/26/2019	3,523,375	\$8.92	\$0.15	1.71%
2/27/2019	5,233,560	\$9.11	\$0.19	2.13%
2/28/2019	5,318,851	\$9.24	\$0.13	1.43%
3/1/2019	3,363,795	\$9.29	\$0.05	0.54%
3/4/2019	5,243,086	\$9.20	-\$0.09	-0.97%
3/5/2019	2,621,726	\$9.16	-\$0.04	-0.43%
3/6/2019	3,166,656	\$9.17	\$0.01	0.11%
3/7/2019	7,621,831	\$8.66	-\$0.51	-5.56%
3/8/2019	3,061,225	\$8.64	-\$0.02	-0.23%
3/11/2019	8,807,727	\$9.12	\$0.48	5.56%
3/12/2019	5,443,039	\$8.86	-\$0.26	-2.85%
3/13/2019	3,636,909	\$9.06	\$0.20	2.26%
3/14/2019	3,831,294	\$8.91	-\$0.15	-1.66%
3/15/2019	3,588,217	\$8.88	-\$0.03	-0.34%
3/18/2019	8,077,880	\$9.26	\$0.38	4.28%
3/19/2019	5,657,407	\$9.05	-\$0.21	-2.27%
3/20/2019	7,849,079	\$8.78	-\$0.27	-2.98%
3/21/2019	7,016,648	\$8.43	-\$0.35	-3.99%
3/22/2019	6,528,499	\$8.21	-\$0.22	-2.61%
3/25/2019	8,126,929	\$8.17	-\$0.04	-0.49%
3/26/2019	6,966,211	\$8.28	\$0.11	1.35%
3/27/2019	6,264,748	\$8.46	\$0.18	2.17%
3/28/2019	11,898,267	\$8.19	-\$0.27	-3.19%
3/29/2019	6,342,249	\$8.12	-\$0.07	-0.85%
4/1/2019	7,807,082	\$8.55	\$0.43	5.30%
4/2/2019	4,754,153	\$8.50	-\$0.05	-0.58%
4/3/2019	5,370,577	\$8.59	\$0.09	1.06%
4/4/2019	5,605,938	\$8.50	-\$0.09	-1.05%
4/5/2019	3,678,272	\$8.35	-\$0.15	-1.76%
4/8/2019	4,820,813	\$8.32	-\$0.03	-0.36%
4/9/2019	3,607,399	\$8.24	-\$0.08	-0.96%
4/10/2019	5,166,513	\$8.21	-\$0.03	-0.36%
4/11/2019	5,381,436	\$8.39	\$0.18	2.19%
4/12/2019	5,602,280	\$8.61	\$0.22	2.62%
4/15/2019	4,915,731	\$8.64	\$0.03	0.35%
4/16/2019	5,743,628	\$8.87	\$0.23	2.66%
4/17/2019	6,183,276	\$8.93	\$0.06	0.68%
4/18/2019	3,712,461	\$8.78	-\$0.15	-1.68%
4/22/2019	2,035,495	\$8.75	-\$0.03	-0.34%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
4/23/2019	9,599,084	\$8.54	-\$0.21	-2.40%
4/24/2019	5,034,440	\$8.50	-\$0.04	-0.47%
4/25/2019	7,283,754	\$8.35	-\$0.15	-1.76%
4/26/2019	4,818,042	\$8.19	-\$0.16	-1.92%
4/29/2019	4,494,426	\$8.32	\$0.13	1.59%
4/30/2019	2,539,626	\$8.28	-\$0.04	-0.48%
5/1/2019	3,354,900	\$8.15	-\$0.13	-1.57%
5/2/2019	2,711,622	\$8.22	\$0.07	0.86%
5/3/2019	2,487,228	\$8.22	\$0.00	0.00%
5/6/2019	4,349,591	\$8.11	-\$0.11	-1.34%
5/7/2019	7,877,369	\$7.82	-\$0.29	-3.58%
5/8/2019	3,412,497	\$7.87	\$0.05	0.64%
5/9/2019	4,581,534	\$7.78	-\$0.09	-1.14%
5/10/2019	3,726,620	\$7.87	\$0.09	1.16%
5/13/2019	6,126,177	\$7.64	-\$0.23	-2.92%
5/14/2019	3,611,277	\$7.68	\$0.04	0.52%
5/15/2019	4,830,036	\$7.67	-\$0.01	-0.13%
5/16/2019	5,072,845	\$7.66	-\$0.01	-0.13%
5/17/2019	2,929,461	\$7.58	-\$0.08	-1.04%
5/20/2019	5,135,213	\$7.43	-\$0.15	-1.98%
5/21/2019	3,427,551	\$7.52	\$0.09	1.21%
5/22/2019	4,292,959	\$7.34	-\$0.18	-2.39%
5/23/2019	6,561,139	\$7.23	-\$0.11	-1.50%
5/24/2019	3,116,470	\$7.18	-\$0.05	-0.69%
5/28/2019	5,371,881	\$7.02	-\$0.16	-2.23%
5/29/2019	5,100,040	\$6.92	-\$0.10	-1.42%
5/30/2019	6,444,355	\$6.91	-\$0.01	-0.14%
5/31/2019	5,815,676	\$6.77	-\$0.14	-2.03%
6/3/2019	5,905,007	\$6.73	-\$0.04	-0.59%
6/4/2019	7,800,670	\$7.07	\$0.34	5.05%
6/5/2019	4,270,086	\$6.92	-\$0.15	-2.12%
6/6/2019	6,551,897	\$6.75	-\$0.17	-2.46%
6/7/2019	2,998,977	\$6.76	\$0.01	0.15%
6/10/2019	3,794,737	\$6.89	\$0.13	1.92%
6/11/2019	9,798,940	\$6.98	\$0.09	1.31%
6/12/2019	4,000,016	\$6.88	-\$0.10	-1.43%
6/13/2019	2,624,594	\$6.87	-\$0.01	-0.15%
6/14/2019	2,474,313	\$6.79	-\$0.08	-1.16%
6/17/2019	4,518,820	\$6.82	\$0.03	0.44%
6/18/2019	7,085,404	\$7.08	\$0.26	3.81%
6/19/2019	5,500,893	\$7.17	\$0.09	1.27%
6/20/2019	5,568,743	\$7.17	\$0.00	0.00%
6/21/2019	3,267,910	\$7.18	\$0.01	0.14%
6/24/2019	3,541,070	\$7.10	-\$0.08	-1.11%
6/25/2019	4,534,656	\$7.12	\$0.02	0.28%
6/26/2019	4,736,119	\$7.37	\$0.25	3.51%
6/27/2019	7,590,435	\$7.54	\$0.17	2.31%
6/28/2019	7,631,767	\$7.63	\$0.09	1.19%
7/1/2019	5,434,683	\$7.64	\$0.01	0.13%
7/2/2019	2,643,913	\$7.59	-\$0.05	-0.65%
7/3/2019	3,955,932	\$7.81	\$0.22	2.90%
7/5/2019	9,271,316	\$8.03	\$0.22	2.82%
7/8/2019	19,868,972	\$7.54	-\$0.49	-6.10%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
7/9/2019	10,129,549	\$7.28	-\$0.26	-3.45%
7/10/2019	7,037,146	\$7.40	\$0.12	1.65%
7/11/2019	4,952,288	\$7.48	\$0.08	1.08%
7/12/2019	6,487,439	\$7.67	\$0.19	2.54%
7/15/2019	5,487,547	\$7.77	\$0.10	1.30%
7/16/2019	9,816,481	\$7.97	\$0.20	2.57%
7/17/2019	5,059,081	\$7.88	-\$0.09	-1.13%
7/18/2019	3,810,977	\$7.93	\$0.05	0.63%
7/19/2019	5,424,883	\$7.72	-\$0.21	-2.65%
7/22/2019	2,857,103	\$7.80	\$0.08	1.04%
7/23/2019	5,412,018	\$7.95	\$0.15	1.92%
7/24/2019	8,203,519	\$7.92	-\$0.03	-0.38%
7/25/2019	7,564,959	\$7.90	-\$0.02	-0.25%
7/26/2019	4,561,788	\$7.93	\$0.03	0.38%
7/29/2019	3,211,373	\$7.83	-\$0.10	-1.26%
7/30/2019	5,938,421	\$7.75	-\$0.08	-1.02%
7/31/2019	5,692,782	\$7.81	\$0.06	0.77%
8/1/2019	8,559,416	\$7.61	-\$0.20	-2.56%
8/2/2019	5,538,160	\$7.89	\$0.28	3.68%
8/5/2019	5,814,069	\$7.65	-\$0.24	-3.04%
8/6/2019	5,752,743	\$7.63	-\$0.02	-0.26%
8/7/2019	7,232,523	\$7.47	-\$0.16	-2.10%
8/8/2019	6,809,795	\$7.66	\$0.19	2.54%
8/9/2019	4,678,215	\$7.53	-\$0.13	-1.70%
8/12/2019	15,372,905	\$6.95	-\$0.58	-7.70%
8/13/2019	11,060,108	\$7.21	\$0.26	3.74%
8/14/2019	10,756,796	\$6.69	-\$0.52	-7.21%
8/15/2019	11,136,563	\$6.44	-\$0.25	-3.74%
8/16/2019	14,495,986	\$6.94	\$0.50	7.76%
8/19/2019	6,734,287	\$7.05	\$0.11	1.59%
8/20/2019	8,859,515	\$6.97	-\$0.08	-1.13%
8/21/2019	8,909,331	\$7.01	\$0.04	0.57%
8/22/2019	5,746,068	\$7.17	\$0.16	2.28%
8/23/2019	6,324,776	\$6.97	-\$0.20	-2.79%
8/26/2019	4,324,488	\$7.07	\$0.10	1.43%
8/27/2019	6,217,069	\$7.13	\$0.06	0.85%
8/28/2019	2,734,712	\$7.16	\$0.03	0.42%
8/29/2019	3,394,042	\$7.22	\$0.06	0.84%
8/30/2019	3,045,287	\$7.25	\$0.03	0.42%
9/3/2019	6,163,443	\$7.30	\$0.05	0.69%
9/4/2019	3,907,944	\$7.48	\$0.18	2.47%
9/5/2019	8,565,596	\$7.82	\$0.34	4.55%
9/6/2019	3,480,447	\$7.85	\$0.03	0.38%
9/9/2019	6,726,318	\$8.13	\$0.28	3.57%
9/10/2019	6,733,783	\$8.30	\$0.17	2.09%
9/11/2019	8,082,270	\$8.29	-\$0.01	-0.12%
9/12/2019	10,229,173	\$8.32	\$0.03	0.36%
9/13/2019	6,939,022	\$8.45	\$0.13	1.56%
9/16/2019	9,456,245	\$8.23	-\$0.22	-2.60%
9/17/2019	5,765,615	\$8.19	-\$0.04	-0.49%
9/18/2019	4,687,165	\$8.06	-\$0.13	-1.59%
9/19/2019	3,333,706	\$8.07	\$0.01	0.12%
9/20/2019	3,955,076	\$7.99	-\$0.08	-0.99%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
9/23/2019	8,361,188	\$7.79	-\$0.20	-2.50%
9/24/2019	6,455,383	\$7.58	-\$0.21	-2.70%
9/25/2019	5,208,932	\$7.58	\$0.00	0.00%
9/26/2019	3,182,142	\$7.42	-\$0.16	-2.11%
9/27/2019	3,823,686	\$7.56	\$0.14	1.89%
9/30/2019	3,486,982	\$7.50	-\$0.06	-0.79%
10/1/2019	6,236,926	\$7.25	-\$0.25	-3.33%
10/2/2019	5,478,547	\$7.19	-\$0.06	-0.83%
10/3/2019	5,521,199	\$7.15	-\$0.04	-0.56%
10/4/2019	3,282,273	\$7.19	\$0.04	0.56%
10/7/2019	4,054,766	\$7.09	-\$0.10	-1.39%
10/8/2019	6,914,716	\$6.92	-\$0.17	-2.40%
10/9/2019	4,323,571	\$6.94	\$0.02	0.29%
10/10/2019	5,630,712	\$7.13	\$0.19	2.74%
10/11/2019	6,574,615	\$7.46	\$0.33	4.63%
10/14/2019	3,399,671	\$7.55	\$0.09	1.21%
10/15/2019	5,774,185	\$7.78	\$0.23	3.05%
10/16/2019	5,183,900	\$7.84	\$0.06	0.77%
10/17/2019	5,470,012	\$7.90	\$0.06	0.77%
10/18/2019	5,034,929	\$7.92	\$0.02	0.25%
10/21/2019	5,714,394	\$8.08	\$0.16	2.02%
10/22/2019	10,237,313	\$7.91	-\$0.17	-2.10%
10/23/2019	3,547,745	\$7.99	\$0.08	1.01%
10/24/2019	5,754,759	\$7.90	-\$0.09	-1.13%
10/25/2019	2,985,147	\$7.97	\$0.07	0.89%
10/28/2019	5,531,480	\$8.05	\$0.08	1.00%
10/29/2019	3,999,745	\$7.98	-\$0.07	-0.87%
10/30/2019	19,220,606	\$7.36	-\$0.62	-7.77%
10/31/2019	5,244,930	\$7.25	-\$0.11	-1.49%
11/1/2019	3,906,175	\$7.39	\$0.14	1.93%
11/4/2019	5,264,076	\$7.66	\$0.27	3.65%
11/5/2019	5,683,251	\$7.61	-\$0.05	-0.65%
11/6/2019	4,469,444	\$7.65	\$0.04	0.53%
11/7/2019	5,334,812	\$7.76	\$0.11	1.44%
11/8/2019	5,744,329	\$7.63	-\$0.13	-1.68%
11/11/2019	2,959,726	\$7.61	-\$0.02	-0.26%
11/12/2019	3,211,791	\$7.63	\$0.02	0.26%
11/13/2019	5,801,618	\$7.28	-\$0.35	-4.59%
11/14/2019	4,273,927	\$7.21	-\$0.07	-0.96%
11/15/2019	3,548,143	\$7.31	\$0.10	1.39%
11/18/2019	2,018,986	\$7.35	\$0.04	0.55%
11/19/2019	4,584,525	\$7.35	\$0.00	0.00%
11/20/2019	5,301,043	\$7.30	-\$0.05	-0.68%
11/21/2019	4,026,833	\$7.38	\$0.08	1.10%
11/22/2019	3,158,082	\$7.36	-\$0.02	-0.27%
11/25/2019	3,589,583	\$7.38	\$0.02	0.27%
11/26/2019	3,178,929	\$7.29	-\$0.09	-1.22%
11/27/2019	2,867,185	\$7.36	\$0.07	0.96%
11/29/2019	2,807,378	\$7.21	-\$0.15	-2.04%
12/2/2019	3,894,963	\$7.19	-\$0.02	-0.28%
12/3/2019	4,884,211	\$7.06	-\$0.13	-1.81%
12/4/2019	4,000,233	\$7.17	\$0.11	1.56%
12/5/2019	2,930,596	\$7.18	\$0.01	0.14%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
12/6/2019	2,117,499	\$7.22	\$0.04	0.56%
12/9/2019	3,807,540	\$7.21	-\$0.01	-0.14%
12/10/2019	3,888,091	\$7.19	-\$0.02	-0.28%
12/11/2019	2,721,794	\$7.26	\$0.07	0.97%
12/12/2019	12,541,338	\$7.57	\$0.31	4.27%
12/13/2019	5,662,689	\$7.48	-\$0.09	-1.19%
12/16/2019	4,439,177	\$7.69	\$0.21	2.81%
12/17/2019	4,468,116	\$7.81	\$0.12	1.56%
12/18/2019	2,734,306	\$7.75	-\$0.06	-0.77%
12/19/2019	2,935,502	\$7.89	\$0.14	1.81%
12/20/2019	3,000,069	\$7.77	-\$0.12	-1.52%
12/23/2019	3,270,148	\$7.67	-\$0.10	-1.29%
12/24/2019	940,979	\$7.62	-\$0.05	-0.65%
12/26/2019	2,243,933	\$7.66	\$0.04	0.52%
12/27/2019	2,525,156	\$7.69	\$0.03	0.39%
12/30/2019	2,841,443	\$7.72	\$0.03	0.39%
12/31/2019	2,234,429	\$7.78	\$0.06	0.78%
1/2/2020	11,434,853	\$8.33	\$0.55	7.07%
1/3/2020	5,744,472	\$8.12	-\$0.21	-2.52%
1/6/2020	5,566,954	\$8.06	-\$0.06	-0.74%
1/7/2020	4,535,477	\$8.25	\$0.19	2.36%
1/8/2020	8,386,132	\$8.57	\$0.32	3.88%
1/9/2020	4,905,222	\$8.61	\$0.04	0.47%
1/10/2020	3,734,118	\$8.52	-\$0.09	-1.05%
1/13/2020	4,841,393	\$8.48	-\$0.04	-0.47%
1/14/2020	5,661,484	\$8.58	\$0.10	1.18%
1/15/2020	5,260,750	\$8.41	-\$0.17	-1.98%
1/16/2020	3,089,016	\$8.54	\$0.13	1.55%
1/17/2020	4,388,864	\$8.42	-\$0.12	-1.41%
1/21/2020	3,883,590	\$8.27	-\$0.15	-1.78%
1/22/2020	3,243,180	\$8.40	\$0.13	1.57%
1/23/2020	6,494,843	\$8.56	\$0.16	1.90%
1/24/2020	8,226,052	\$8.57	\$0.01	0.12%
1/27/2020	5,431,067	\$8.54	-\$0.03	-0.35%
1/28/2020	3,801,326	\$8.67	\$0.13	1.52%
1/29/2020	5,691,275	\$8.77	\$0.10	1.15%
1/30/2020	11,896,526	\$9.30	\$0.53	6.04%
1/31/2020	8,241,772	\$9.15	-\$0.15	-1.61%
2/3/2020	5,670,330	\$8.96	-\$0.19	-2.08%
2/4/2020	4,721,952	\$8.99	\$0.03	0.33%
2/5/2020	5,814,911	\$9.11	\$0.12	1.33%
2/6/2020	23,345,354	\$10.37	\$1.26	13.83%
2/7/2020	5,954,297	\$10.41	\$0.04	0.39%
2/10/2020	8,158,472	\$10.30	-\$0.11	-1.06%
2/11/2020	7,890,221	\$10.50	\$0.20	1.94%
2/12/2020	5,476,615	\$10.85	\$0.35	3.33%
2/13/2020	8,443,364	\$11.02	\$0.17	1.57%
2/14/2020	5,973,885	\$11.04	\$0.02	0.18%
2/18/2020	6,397,484	\$10.71	-\$0.33	-2.99%
2/19/2020	7,628,259	\$10.67	-\$0.04	-0.37%
2/20/2020	6,287,826	\$10.67	\$0.00	0.00%
2/21/2020	11,119,138	\$10.24	-\$0.43	-4.03%
2/24/2020	10,693,837	\$9.64	-\$0.60	-5.86%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
2/25/2020	16,133,064	\$9.33	-\$0.31	-3.22%
2/26/2020	8,695,382	\$9.45	\$0.12	1.29%
2/27/2020	12,148,439	\$8.98	-\$0.47	-4.97%
2/28/2020	9,583,771	\$8.72	-\$0.26	-2.90%
3/2/2020	12,264,636	\$8.59	-\$0.13	-1.49%
3/3/2020	15,845,556	\$8.14	-\$0.45	-5.24%
3/4/2020	10,606,178	\$8.20	\$0.06	0.74%
3/5/2020	11,179,988	\$7.75	-\$0.45	-5.49%
3/6/2020	10,970,254	\$7.59	-\$0.16	-2.06%
3/9/2020	13,790,369	\$6.62	-\$0.97	-12.78%
3/10/2020	11,166,075	\$6.96	\$0.34	5.14%
3/11/2020	18,292,362	\$6.51	-\$0.45	-6.47%
3/12/2020	16,434,763	\$5.53	-\$0.98	-15.05%
3/13/2020	10,609,870	\$5.97	\$0.44	7.96%
3/16/2020	12,521,291	\$5.48	-\$0.49	-8.21%
3/17/2020	11,880,609	\$5.79	\$0.31	5.66%
3/18/2020	15,663,604	\$5.56	-\$0.23	-3.97%
3/19/2020	13,403,120	\$5.86	\$0.30	5.40%
3/20/2020	12,969,959	\$5.76	-\$0.10	-1.71%
3/23/2020	11,118,950	\$5.84	\$0.08	1.39%
3/24/2020	9,838,860	\$6.58	\$0.74	12.67%
3/25/2020	10,449,073	\$6.88	\$0.30	4.56%
3/26/2020	8,199,547	\$6.99	\$0.11	1.60%
3/27/2020	6,165,211	\$6.47	-\$0.52	-7.44%
3/30/2020	5,937,723	\$6.51	\$0.04	0.62%
3/31/2020	5,113,991	\$6.42	-\$0.09	-1.38%
4/1/2020	5,716,223	\$5.96	-\$0.46	-7.17%
4/2/2020	6,539,395	\$6.02	\$0.06	1.01%
4/3/2020	4,594,293	\$5.90	-\$0.12	-1.99%
4/6/2020	5,750,318	\$6.38	\$0.48	8.14%
4/7/2020	7,775,573	\$6.64	\$0.26	4.08%
4/8/2020	4,605,047	\$6.54	-\$0.10	-1.51%
4/9/2020	7,326,863	\$6.69	\$0.15	2.29%
4/13/2020	3,851,730	\$6.52	-\$0.17	-2.54%
4/14/2020	6,054,047	\$6.85	\$0.33	5.06%
4/15/2020	7,404,076	\$6.23	-\$0.62	-9.05%
4/16/2020	2,359,206	\$6.22	-\$0.01	-0.16%
4/17/2020	4,337,295	\$6.54	\$0.32	5.14%
4/20/2020	5,056,080	\$6.33	-\$0.21	-3.21%
4/21/2020	6,791,261	\$6.08	-\$0.25	-3.95%
4/22/2020	4,357,372	\$6.09	\$0.01	0.16%
4/23/2020	5,646,148	\$6.18	\$0.09	1.48%
4/24/2020	6,439,824	\$5.95	-\$0.23	-3.72%
4/27/2020	9,091,582	\$6.69	\$0.74	12.44%
4/28/2020	7,676,040	\$6.85	\$0.16	2.39%
4/29/2020	12,885,532	\$7.67	\$0.82	11.97%
4/30/2020	6,193,381	\$7.41	-\$0.26	-3.39%
5/1/2020	5,636,558	\$7.15	-\$0.26	-3.51%
5/4/2020	7,268,500	\$7.05	-\$0.10	-1.40%
5/5/2020	4,709,581	\$6.97	-\$0.08	-1.13%
5/6/2020	5,273,281	\$6.80	-\$0.17	-2.44%
5/7/2020	5,227,232	\$6.99	\$0.19	2.79%
5/8/2020	2,759,094	\$7.13	\$0.14	2.00%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
5/11/2020	4,329,837	\$6.93	-\$0.20	-2.81%
5/12/2020	5,591,775	\$6.91	-\$0.02	-0.29%
5/13/2020	5,082,177	\$6.60	-\$0.31	-4.49%
5/14/2020	5,277,182	\$6.66	\$0.06	0.91%
5/15/2020	5,979,838	\$6.44	-\$0.22	-3.30%
5/18/2020	8,496,321	\$7.13	\$0.69	10.71%
5/19/2020	7,553,232	\$7.06	-\$0.07	-0.98%
5/20/2020	6,453,003	\$7.51	\$0.45	6.37%
5/21/2020	2,832,432	\$7.36	-\$0.15	-2.00%
5/22/2020	3,174,901	\$7.32	-\$0.04	-0.54%
5/26/2020	9,982,457	\$8.21	\$0.89	12.16%
5/27/2020	9,086,473	\$8.68	\$0.47	5.72%
5/28/2020	8,666,587	\$8.51	-\$0.17	-1.96%
5/29/2020	5,230,577	\$8.40	-\$0.11	-1.29%
6/1/2020	4,256,390	\$8.69	\$0.29	3.45%
6/2/2020	6,240,397	\$8.90	\$0.21	2.42%
6/3/2020	7,084,000	\$9.22	\$0.32	3.60%
6/4/2020	8,666,640	\$9.49	\$0.27	2.93%
6/5/2020	8,949,277	\$9.69	\$0.20	2.11%
6/8/2020	10,254,805	\$10.20	\$0.51	5.26%
6/9/2020	7,490,265	\$9.82	-\$0.38	-3.73%
6/10/2020	7,838,478	\$9.78	-\$0.04	-0.41%
6/11/2020	9,508,308	\$9.00	-\$0.78	-7.98%
6/12/2020	7,074,688	\$9.39	\$0.39	4.33%
6/15/2020	4,497,694	\$9.47	\$0.08	0.85%
6/16/2020	4,582,310	\$9.55	\$0.08	0.84%
6/17/2020	5,251,399	\$9.34	-\$0.21	-2.20%
6/18/2020	5,371,288	\$9.24	-\$0.10	-1.07%
6/19/2020	3,718,869	\$9.22	-\$0.02	-0.22%
6/22/2020	5,747,380	\$9.35	\$0.13	1.41%
6/23/2020	4,365,652	\$9.55	\$0.20	2.14%
6/24/2020	3,926,216	\$9.12	-\$0.43	-4.50%
6/25/2020	4,898,414	\$9.57	\$0.45	4.93%
6/26/2020	6,531,881	\$9.00	-\$0.57	-5.96%
6/29/2020	4,163,992	\$9.46	\$0.46	5.11%
6/30/2020	3,566,447	\$9.52	\$0.06	0.63%
7/1/2020	4,649,692	\$9.32	-\$0.20	-2.10%
7/2/2020	4,819,496	\$9.53	\$0.21	2.25%
7/6/2020	5,252,569	\$9.95	\$0.42	4.41%
7/7/2020	2,921,972	\$9.82	-\$0.13	-1.31%
7/8/2020	3,390,353	\$10.00	\$0.18	1.83%
7/9/2020	4,721,587	\$9.72	-\$0.28	-2.80%
7/10/2020	4,689,165	\$10.10	\$0.38	3.91%
7/13/2020	5,412,898	\$9.73	-\$0.37	-3.66%
7/14/2020	5,456,954	\$10.02	\$0.29	2.98%
7/15/2020	4,563,502	\$10.19	\$0.17	1.70%
7/16/2020	3,959,741	\$10.04	-\$0.15	-1.47%
7/17/2020	3,163,154	\$9.97	-\$0.07	-0.70%
7/20/2020	2,580,601	\$10.18	\$0.21	2.11%
7/21/2020	4,770,865	\$9.74	-\$0.44	-4.32%
7/22/2020	3,463,961	\$9.83	\$0.09	0.92%
7/23/2020	3,074,057	\$9.62	-\$0.21	-2.14%
7/24/2020	2,643,070	\$9.61	-\$0.01	-0.10%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
7/27/2020	1,890,791	\$9.55	-\$0.06	-0.62%
7/28/2020	3,287,678	\$9.45	-\$0.10	-1.05%
7/29/2020	11,404,410	\$9.22	-\$0.23	-2.43%
7/30/2020	7,392,671	\$9.00	-\$0.22	-2.39%
7/31/2020	3,462,399	\$8.92	-\$0.08	-0.89%
8/3/2020	2,546,694	\$9.22	\$0.30	3.36%
8/4/2020	2,497,276	\$9.25	\$0.03	0.33%
8/5/2020	3,754,763	\$9.34	\$0.09	0.97%
8/6/2020	1,708,529	\$9.22	-\$0.12	-1.28%
8/7/2020	2,508,662	\$9.22	\$0.00	0.00%
8/10/2020	2,065,312	\$9.42	\$0.20	2.17%
8/11/2020	3,508,447	\$9.56	\$0.14	1.49%
8/12/2020	3,164,574	\$9.71	\$0.15	1.57%
8/13/2020	2,497,889	\$9.55	-\$0.16	-1.65%
8/14/2020	2,105,670	\$9.52	-\$0.03	-0.31%
8/17/2020	1,870,135	\$9.46	-\$0.06	-0.63%
8/18/2020	1,701,625	\$9.40	-\$0.06	-0.63%
8/19/2020	2,161,675	\$9.54	\$0.14	1.49%
8/20/2020	2,331,830	\$9.34	-\$0.20	-2.10%
8/21/2020	2,635,384	\$9.18	-\$0.16	-1.71%
8/24/2020	4,158,631	\$9.59	\$0.41	4.47%
8/25/2020	2,338,099	\$9.64	\$0.05	0.52%
8/26/2020	2,984,751	\$9.81	\$0.17	1.76%
8/27/2020	2,388,633	\$9.73	-\$0.08	-0.82%
8/28/2020	4,900,404	\$9.89	\$0.16	1.64%
8/31/2020	3,877,354	\$9.53	-\$0.36	-3.64%
9/1/2020	3,344,698	\$9.52	-\$0.01	-0.10%
9/2/2020	2,765,204	\$9.45	-\$0.07	-0.74%
9/3/2020	3,552,813	\$9.29	-\$0.16	-1.69%
9/4/2020	4,747,384	\$9.73	\$0.44	4.74%
9/8/2020	8,427,258	\$9.41	-\$0.32	-3.29%
9/9/2020	3,082,867	\$9.42	\$0.01	0.11%
9/10/2020	2,899,590	\$9.35	-\$0.07	-0.74%
9/11/2020	3,161,740	\$9.26	-\$0.09	-0.96%
9/14/2020	2,016,691	\$9.34	\$0.08	0.86%
9/15/2020	2,069,730	\$9.10	-\$0.24	-2.57%
9/16/2020	3,078,306	\$9.29	\$0.19	2.09%
9/17/2020	2,295,581	\$9.24	-\$0.05	-0.54%
9/18/2020	3,089,016	\$9.09	-\$0.15	-1.62%
9/21/2020	12,790,870	\$8.34	-\$0.75	-8.25%
9/22/2020	4,681,059	\$8.14	-\$0.20	-2.40%
9/23/2020	5,217,430	\$8.05	-\$0.09	-1.11%
9/24/2020	3,842,216	\$8.11	\$0.06	0.75%
9/25/2020	5,571,021	\$8.00	-\$0.11	-1.36%
9/28/2020	4,359,602	\$8.43	\$0.43	5.38%
9/29/2020	4,034,016	\$8.27	-\$0.16	-1.90%
9/30/2020	4,516,292	\$8.40	\$0.13	1.57%
10/1/2020	4,289,997	\$8.36	-\$0.04	-0.48%
10/2/2020	3,401,567	\$8.50	\$0.14	1.67%
10/5/2020	5,380,463	\$8.70	\$0.20	2.35%
10/6/2020	7,807,205	\$9.01	\$0.31	3.56%
10/7/2020	4,203,936	\$9.23	\$0.22	2.44%
10/8/2020	4,654,976	\$9.36	\$0.13	1.41%

Exhibit 3B**Deutsche Bank AG (US)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
10/9/2020	2,246,446	\$9.28	-\$0.08	-0.85%
10/12/2020	2,491,167	\$9.34	\$0.06	0.65%
10/13/2020	2,696,182	\$9.11	-\$0.23	-2.46%
10/14/2020	2,282,592	\$9.06	-\$0.05	-0.55%
10/15/2020	2,347,743	\$9.02	-\$0.04	-0.44%
10/16/2020	3,416,349	\$9.25	\$0.23	2.55%
10/19/2020	2,905,228	\$9.28	\$0.03	0.32%
10/20/2020	3,616,456	\$9.60	\$0.32	3.45%
10/21/2020	3,921,804	\$9.41	-\$0.19	-1.98%
10/22/2020	3,170,032	\$9.45	\$0.04	0.43%
10/23/2020	4,096,478	\$9.65	\$0.20	2.12%
10/26/2020	4,411,538	\$9.54	-\$0.11	-1.14%
10/27/2020	3,404,929	\$9.25	-\$0.29	-3.04%
10/28/2020	8,499,931	\$9.25	\$0.00	0.00%
10/29/2020	4,710,349	\$9.24	-\$0.01	-0.11%
10/30/2020	4,411,337	\$9.25	\$0.01	0.11%
11/2/2020	4,668,430	\$9.64	\$0.39	4.22%
11/3/2020	9,659,465	\$9.96	\$0.32	3.32%
11/4/2020	4,692,451	\$9.92	-\$0.04	-0.40%
11/5/2020	4,483,912	\$10.05	\$0.13	1.31%
11/6/2020	2,799,631	\$10.15	\$0.10	1.00%
11/9/2020	10,897,184	\$10.62	\$0.47	4.63%
11/10/2020	10,802,624	\$10.72	\$0.10	0.94%
11/11/2020	4,805,650	\$10.48	-\$0.24	-2.24%
11/12/2020	2,860,748	\$10.41	-\$0.07	-0.67%
11/13/2020	3,894,949	\$10.73	\$0.32	3.07%
11/16/2020	4,010,849	\$10.79	\$0.06	0.56%
11/17/2020	8,973,125	\$10.82	\$0.03	0.28%
11/18/2020	6,422,223	\$10.72	-\$0.10	-0.92%
11/19/2020	2,535,629	\$10.75	\$0.03	0.28%
11/20/2020	2,925,937	\$10.69	-\$0.06	-0.56%
11/23/2020	5,469,344	\$11.04	\$0.35	3.27%
11/24/2020	4,063,461	\$11.46	\$0.42	3.80%
11/25/2020	2,412,971	\$11.37	-\$0.09	-0.79%
11/27/2020	1,208,860	\$11.36	-\$0.01	-0.09%
11/30/2020	3,192,618	\$11.12	-\$0.24	-2.11%
12/1/2020	5,011,714	\$11.45	\$0.33	2.97%
12/2/2020	2,519,493	\$11.58	\$0.13	1.14%
12/3/2020	3,703,313	\$11.77	\$0.19	1.64%
12/4/2020	3,220,895	\$11.77	\$0.00	0.00%
12/7/2020	2,127,321	\$11.58	-\$0.19	-1.61%
12/8/2020	1,671,027	\$11.44	-\$0.14	-1.21%
12/9/2020	2,750,743	\$11.23	-\$0.21	-1.84%
12/10/2020	3,543,601	\$11.00	-\$0.23	-2.05%
12/11/2020	2,789,983	\$10.62	-\$0.38	-3.45%
12/14/2020	3,397,844	\$10.61	-\$0.01	-0.09%
12/15/2020	2,656,412	\$10.85	\$0.24	2.26%
12/16/2020	2,361,738	\$10.95	\$0.10	0.92%
12/17/2020	2,649,095	\$11.13	\$0.18	1.64%

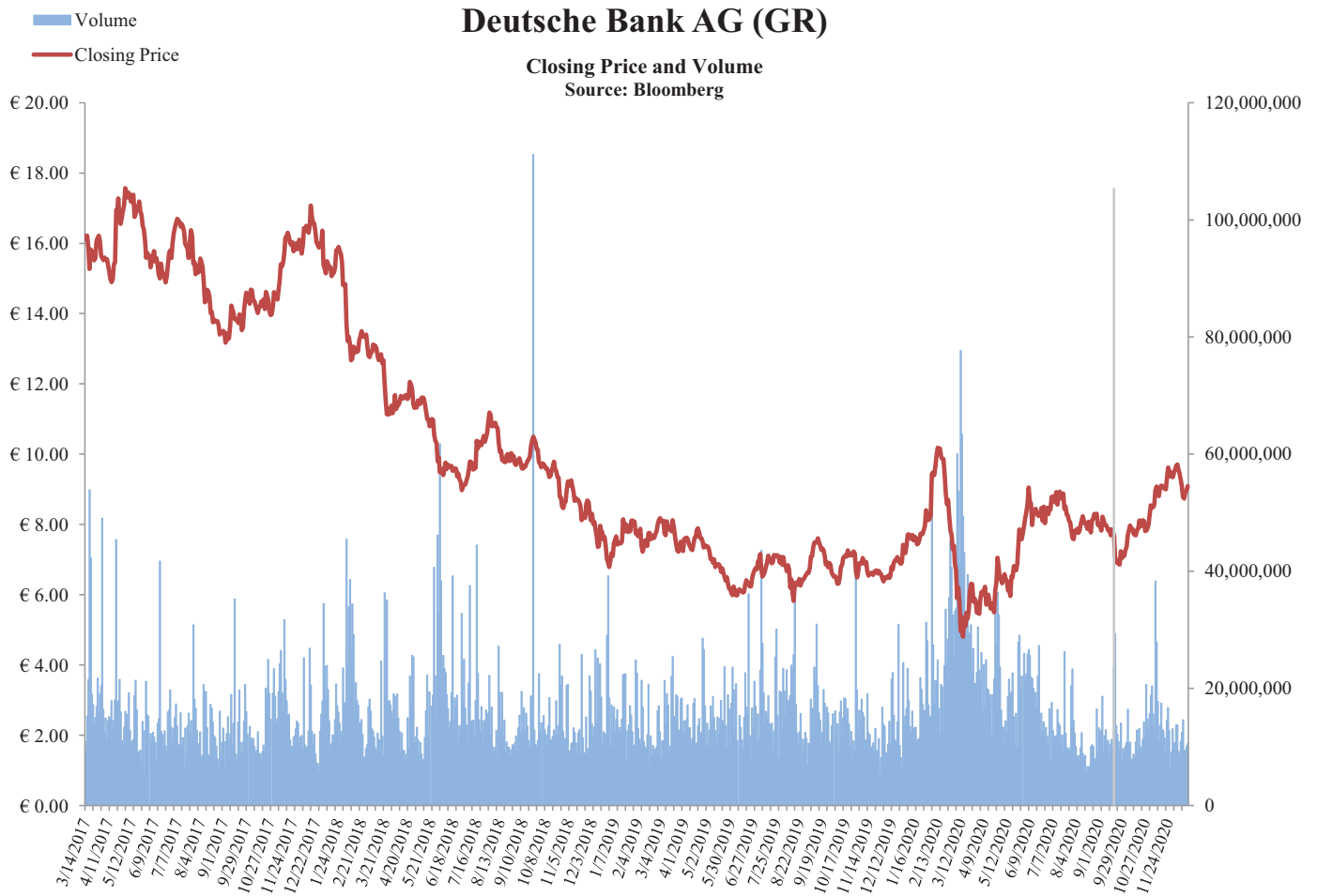
Exhibit 3C

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
3/14/2017	10,912,276	€ 16.21	-€ 0.19	-1.16%
3/15/2017	9,439,936	€ 16.12	-€ 0.09	-0.57%
3/16/2017	15,267,304	€ 16.22	€ 0.10	0.63%
3/17/2017	21,505,420	€ 15.87	-€ 0.35	-2.13%
3/20/2017	53,905,271	€ 15.27	-€ 0.60	-3.77%
3/21/2017	42,262,326	€ 15.83	€ 0.56	3.63%
3/22/2017	18,967,908	€ 15.78	-€ 0.05	-0.32%
3/23/2017	17,211,000	€ 15.72	-€ 0.06	-0.39%
3/24/2017	13,551,565	€ 15.52	-€ 0.20	-1.27%
3/27/2017	15,008,480	€ 15.58	€ 0.06	0.37%
3/28/2017	16,932,580	€ 16.05	€ 0.47	3.04%
3/29/2017	21,734,173	€ 16.16	€ 0.11	0.70%
3/30/2017	15,519,711	€ 16.22	€ 0.05	0.33%
3/31/2017	19,031,953	€ 16.07	-€ 0.15	-0.92%
4/3/2017	20,443,019	€ 15.64	-€ 0.43	-2.65%
4/4/2017	49,079,412	€ 15.58	-€ 0.06	-0.38%
4/5/2017	16,411,961	€ 15.52	-€ 0.06	-0.39%
4/6/2017	12,215,878	€ 15.59	€ 0.07	0.48%
4/7/2017	14,944,502	€ 15.53	-€ 0.06	-0.40%
4/10/2017	11,045,337	€ 15.55	€ 0.02	0.13%
4/11/2017	14,471,560	€ 15.38	-€ 0.17	-1.11%
4/12/2017	15,157,507	€ 15.20	-€ 0.18	-1.15%
4/13/2017	14,671,512	€ 14.98	-€ 0.22	-1.47%
4/18/2017	17,907,753	€ 14.89	-€ 0.09	-0.57%
4/19/2017	12,547,661	€ 14.98	€ 0.08	0.56%
4/20/2017	14,533,123	€ 15.40	€ 0.43	2.86%
4/21/2017	18,032,700	€ 15.45	€ 0.05	0.32%
4/24/2017	45,446,677	€ 16.94	€ 1.49	9.62%
4/25/2017	17,212,035	€ 16.97	€ 0.03	0.17%
4/26/2017	17,854,772	€ 17.28	€ 0.31	1.83%
4/27/2017	21,546,087	€ 16.70	-€ 0.58	-3.35%
4/28/2017	15,971,974	€ 16.55	-€ 0.15	-0.90%
5/2/2017	11,061,861	€ 16.73	€ 0.18	1.06%
5/3/2017	10,086,081	€ 16.92	€ 0.20	1.18%
5/4/2017	13,394,045	€ 17.10	€ 0.17	1.02%
5/5/2017	16,065,379	€ 17.57	€ 0.48	2.78%
5/8/2017	15,576,296	€ 17.47	-€ 0.10	-0.57%
5/9/2017	13,261,965	€ 17.31	-€ 0.16	-0.94%
5/10/2017	19,259,125	€ 17.44	€ 0.13	0.76%
5/11/2017	12,836,215	€ 17.33	-€ 0.11	-0.61%
5/12/2017	10,673,796	€ 17.18	-€ 0.15	-0.88%
5/15/2017	10,972,264	€ 17.38	€ 0.20	1.17%
5/16/2017	11,268,757	€ 17.38	€ 0.00	-0.01%
5/17/2017	18,741,292	€ 16.75	-€ 0.63	-3.61%
5/18/2017	21,373,503	€ 16.84	€ 0.09	0.56%
5/19/2017	16,302,539	€ 17.04	€ 0.20	1.17%
5/22/2017	9,148,501	€ 17.00	-€ 0.04	-0.25%
5/23/2017	9,198,914	€ 17.19	€ 0.19	1.12%
5/24/2017	9,445,930	€ 16.91	-€ 0.28	-1.62%
5/25/2017	7,501,890	€ 16.80	-€ 0.11	-0.66%
5/26/2017	14,338,059	€ 16.50	-€ 0.30	-1.76%
5/29/2017	5,281,510	€ 16.39	-€ 0.12	-0.70%
5/30/2017	12,774,602	€ 16.10	-€ 0.29	-1.78%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
5/31/2017	21,184,414	€ 15.59	-€ 0.51	-3.14%
6/1/2017	15,495,500	€ 15.73	€ 0.14	0.87%
6/2/2017	15,227,865	€ 15.65	-€ 0.08	-0.48%
6/5/2017	1,123	€ 15.65	-€ 0.01	-0.03%
6/6/2017	12,295,338	€ 15.32	-€ 0.33	-2.11%
6/7/2017	11,242,763	€ 15.49	€ 0.18	1.14%
6/8/2017	12,505,512	€ 15.61	€ 0.12	0.75%
6/9/2017	11,738,287	€ 15.78	€ 0.17	1.10%
6/12/2017	10,756,363	€ 15.48	-€ 0.30	-1.87%
6/13/2017	7,614,375	€ 15.58	€ 0.10	0.65%
6/14/2017	13,961,733	€ 15.40	-€ 0.18	-1.16%
6/15/2017	14,818,574	€ 15.12	-€ 0.28	-1.83%
6/16/2017	41,745,983	€ 15.00	-€ 0.12	-0.79%
6/19/2017	12,674,825	€ 15.42	€ 0.42	2.79%
6/20/2017	12,132,971	€ 15.18	-€ 0.24	-1.54%
6/21/2017	10,460,381	€ 15.13	-€ 0.05	-0.35%
6/22/2017	12,744,966	€ 15.02	-€ 0.11	-0.73%
6/23/2017	10,163,999	€ 14.89	-€ 0.13	-0.89%
6/26/2017	9,144,484	€ 15.07	€ 0.19	1.26%
6/27/2017	15,951,464	€ 15.41	€ 0.34	2.24%
6/28/2017	16,275,430	€ 15.74	€ 0.32	2.10%
6/29/2017	19,720,778	€ 15.80	€ 0.07	0.41%
6/30/2017	13,397,939	€ 15.58	-€ 0.22	-1.39%
7/3/2017	10,843,144	€ 16.02	€ 0.44	2.84%
7/4/2017	13,097,883	€ 16.29	€ 0.26	1.65%
7/5/2017	15,018,130	€ 16.45	€ 0.17	1.01%
7/6/2017	17,362,445	€ 16.58	€ 0.12	0.75%
7/7/2017	13,543,501	€ 16.70	€ 0.12	0.72%
7/10/2017	10,362,047	€ 16.65	-€ 0.04	-0.25%
7/11/2017	10,291,313	€ 16.60	-€ 0.05	-0.32%
7/12/2017	15,859,292	€ 16.47	-€ 0.13	-0.79%
7/13/2017	10,051,902	€ 16.55	€ 0.08	0.51%
7/14/2017	11,612,239	€ 16.48	-€ 0.08	-0.47%
7/17/2017	6,470,824	€ 16.35	-€ 0.13	-0.77%
7/18/2017	13,220,893	€ 15.99	-€ 0.36	-2.18%
7/19/2017	8,683,669	€ 15.92	-€ 0.08	-0.48%
7/20/2017	13,621,140	€ 15.85	-€ 0.06	-0.40%
7/21/2017	15,769,027	€ 15.58	-€ 0.27	-1.71%
7/24/2017	12,515,598	€ 16.04	€ 0.45	2.92%
7/25/2017	14,511,144	€ 16.38	€ 0.34	2.11%
7/26/2017	11,489,916	€ 16.21	-€ 0.16	-0.99%
7/27/2017	30,849,483	€ 15.43	-€ 0.79	-4.87%
7/28/2017	18,123,742	€ 15.47	€ 0.04	0.29%
7/31/2017	16,545,952	€ 15.12	-€ 0.35	-2.29%
8/1/2017	12,815,183	€ 15.37	€ 0.25	1.67%
8/2/2017	10,575,818	€ 15.17	-€ 0.20	-1.33%
8/3/2017	10,467,167	€ 15.19	€ 0.03	0.18%
8/4/2017	12,602,721	€ 15.57	€ 0.38	2.48%
8/7/2017	7,917,609	€ 15.48	-€ 0.09	-0.58%
8/8/2017	8,584,671	€ 15.33	-€ 0.15	-0.96%
8/9/2017	20,654,808	€ 14.92	-€ 0.41	-2.69%
8/10/2017	19,024,811	€ 14.32	-€ 0.60	-4.01%
8/11/2017	19,496,571	€ 14.37	€ 0.05	0.37%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
8/14/2017	13,273,640	€ 14.68	€ 0.30	2.11%
8/15/2017	8,684,043	€ 14.62	-€ 0.06	-0.38%
8/16/2017	8,303,989	€ 14.47	-€ 0.15	-1.01%
8/17/2017	17,268,901	€ 14.02	-€ 0.45	-3.14%
8/18/2017	16,591,515	€ 14.05	€ 0.03	0.23%
8/21/2017	14,204,823	€ 13.75	-€ 0.30	-2.13%
8/22/2017	11,924,109	€ 13.83	€ 0.08	0.60%
8/23/2017	11,614,893	€ 13.80	-€ 0.04	-0.27%
8/24/2017	10,118,163	€ 13.78	-€ 0.02	-0.14%
8/25/2017	7,914,062	€ 13.78	€ 0.01	0.06%
8/28/2017	5,161,806	€ 13.68	-€ 0.11	-0.78%
8/29/2017	16,108,277	€ 13.40	-€ 0.27	-2.00%
8/30/2017	8,344,821	€ 13.48	€ 0.08	0.61%
8/31/2017	10,791,748	€ 13.47	-€ 0.01	-0.09%
9/1/2017	13,215,994	€ 13.51	€ 0.04	0.29%
9/4/2017	6,668,727	€ 13.46	-€ 0.05	-0.40%
9/5/2017	10,937,980	€ 13.17	-€ 0.28	-2.10%
9/6/2017	12,362,462	€ 13.43	€ 0.26	1.97%
9/7/2017	15,169,407	€ 13.26	-€ 0.17	-1.27%
9/8/2017	9,109,871	€ 13.30	€ 0.04	0.29%
9/11/2017	12,250,271	€ 13.66	€ 0.36	2.72%
9/12/2017	18,986,208	€ 14.23	€ 0.56	4.13%
9/13/2017	10,151,536	€ 14.11	-€ 0.12	-0.81%
9/14/2017	14,002,165	€ 13.98	-€ 0.13	-0.90%
9/15/2017	35,276,187	€ 13.84	-€ 0.15	-1.04%
9/18/2017	8,742,246	€ 13.84	€ 0.00	-0.02%
9/19/2017	7,373,086	€ 13.79	-€ 0.05	-0.33%
9/20/2017	14,272,669	€ 13.73	-€ 0.06	-0.44%
9/21/2017	19,742,994	€ 13.98	€ 0.25	1.81%
9/22/2017	9,095,252	€ 13.91	-€ 0.07	-0.53%
9/25/2017	10,797,521	€ 13.53	-€ 0.38	-2.73%
9/26/2017	8,732,243	€ 13.60	€ 0.07	0.55%
9/27/2017	14,421,974	€ 14.12	€ 0.52	3.82%
9/28/2017	20,663,085	€ 14.39	€ 0.27	1.91%
9/29/2017	16,023,609	€ 14.59	€ 0.20	1.39%
10/2/2017	12,154,266	€ 14.58	-€ 0.02	-0.10%
10/3/2017	1,085	€ 14.50	-€ 0.08	-0.55%
10/4/2017	13,493,506	€ 14.28	-€ 0.22	-1.50%
10/5/2017	11,542,588	€ 14.68	€ 0.41	2.84%
10/6/2017	10,955,675	€ 14.67	-€ 0.02	-0.12%
10/9/2017	11,486,703	€ 14.38	-€ 0.28	-1.94%
10/10/2017	10,045,673	€ 14.36	-€ 0.02	-0.15%
10/11/2017	8,696,623	€ 14.25	-€ 0.11	-0.74%
10/12/2017	9,424,166	€ 14.13	-€ 0.12	-0.87%
10/13/2017	12,584,225	€ 14.02	-€ 0.11	-0.80%
10/16/2017	8,862,607	€ 14.19	€ 0.17	1.21%
10/17/2017	8,851,870	€ 14.20	€ 0.01	0.07%
10/18/2017	7,601,910	€ 14.35	€ 0.15	1.06%
10/19/2017	9,220,834	€ 14.24	-€ 0.10	-0.72%
10/20/2017	10,337,409	€ 14.41	€ 0.17	1.16%
10/23/2017	8,981,988	€ 14.13	-€ 0.28	-1.94%
10/24/2017	20,027,529	€ 14.61	€ 0.48	3.43%
10/25/2017	18,426,247	€ 14.51	-€ 0.10	-0.71%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
10/26/2017	24,950,589	€ 14.38	-€ 0.13	-0.92%
10/27/2017	19,123,769	€ 14.06	-€ 0.31	-2.18%
10/30/2017	14,728,083	€ 13.96	-€ 0.11	-0.76%
10/31/2017	1,066	€ 13.98	€ 0.02	0.14%
11/1/2017	19,171,704	€ 14.20	€ 0.22	1.60%
11/2/2017	23,373,063	€ 14.61	€ 0.41	2.89%
11/3/2017	18,653,800	€ 14.44	-€ 0.17	-1.16%
11/6/2017	13,993,341	€ 14.49	€ 0.05	0.35%
11/7/2017	14,809,413	€ 14.40	-€ 0.09	-0.61%
11/8/2017	19,459,051	€ 14.65	€ 0.25	1.76%
11/9/2017	24,219,756	€ 14.92	€ 0.27	1.82%
11/10/2017	26,456,420	€ 15.40	€ 0.48	3.22%
11/13/2017	19,222,346	€ 15.34	-€ 0.06	-0.38%
11/14/2017	16,107,369	€ 15.44	€ 0.10	0.65%
11/15/2017	31,763,633	€ 15.71	€ 0.27	1.73%
11/16/2017	21,544,346	€ 16.16	€ 0.45	2.88%
11/17/2017	17,843,786	€ 16.21	€ 0.05	0.28%
11/20/2017	15,540,122	€ 16.30	€ 0.09	0.58%
11/21/2017	15,606,287	€ 16.18	-€ 0.12	-0.74%
11/22/2017	11,239,251	€ 16.01	-€ 0.17	-1.08%
11/23/2017	10,102,755	€ 15.95	-€ 0.05	-0.34%
11/24/2017	9,818,691	€ 16.03	€ 0.08	0.49%
11/27/2017	11,662,742	€ 15.78	-€ 0.26	-1.60%
11/28/2017	11,866,109	€ 15.90	€ 0.13	0.79%
11/29/2017	13,081,388	€ 16.00	€ 0.10	0.63%
11/30/2017	14,427,376	€ 15.83	-€ 0.17	-1.04%
12/1/2017	14,114,677	€ 15.90	€ 0.07	0.42%
12/4/2017	10,464,510	€ 16.10	€ 0.20	1.28%
12/5/2017	11,683,051	€ 15.88	-€ 0.23	-1.40%
12/6/2017	11,969,587	€ 15.71	-€ 0.17	-1.07%
12/7/2017	9,602,853	€ 15.94	€ 0.23	1.48%
12/8/2017	25,226,664	€ 16.43	€ 0.49	3.10%
12/11/2017	10,375,349	€ 16.39	-€ 0.04	-0.26%
12/12/2017	9,760,929	€ 16.50	€ 0.11	0.67%
12/13/2017	10,027,527	€ 16.38	-€ 0.12	-0.71%
12/14/2017	12,758,684	€ 16.30	-€ 0.08	-0.51%
12/15/2017	26,868,873	€ 16.52	€ 0.22	1.34%
12/18/2017	20,575,319	€ 17.07	€ 0.55	3.35%
12/19/2017	12,639,828	€ 16.76	-€ 0.31	-1.80%
12/20/2017	10,385,454	€ 16.60	-€ 0.16	-0.97%
12/21/2017	12,166,152	€ 16.56	-€ 0.05	-0.27%
12/22/2017	8,796,097	€ 16.34	-€ 0.22	-1.30%
12/27/2017	7,256,170	€ 16.03	-€ 0.32	-1.93%
12/28/2017	7,154,748	€ 15.96	-€ 0.06	-0.39%
12/29/2017	5,697,678	€ 15.88	-€ 0.09	-0.55%
1/2/2018	12,680,173	€ 16.01	€ 0.13	0.83%
1/3/2018	15,571,328	€ 15.92	-€ 0.08	-0.51%
1/4/2018	17,837,459	€ 16.36	€ 0.44	2.74%
1/5/2018	34,514,116	€ 15.38	-€ 0.98	-5.99%
1/8/2018	23,800,935	€ 15.29	-€ 0.09	-0.59%
1/9/2018	18,035,459	€ 15.15	-€ 0.14	-0.94%
1/10/2018	23,963,066	€ 15.49	€ 0.34	2.26%
1/11/2018	19,755,241	€ 15.41	-€ 0.08	-0.50%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
1/12/2018	14,461,679	€ 15.29	-€ 0.12	-0.78%
1/15/2018	8,140,661	€ 15.33	€ 0.04	0.24%
1/16/2018	10,528,644	€ 15.06	-€ 0.26	-1.71%
1/17/2018	12,095,694	€ 15.13	€ 0.06	0.42%
1/18/2018	11,647,882	€ 15.16	€ 0.04	0.24%
1/19/2018	14,695,500	€ 15.31	€ 0.14	0.95%
1/22/2018	20,745,586	€ 15.80	€ 0.49	3.21%
1/23/2018	17,018,288	€ 15.82	€ 0.02	0.15%
1/24/2018	15,917,947	€ 15.90	€ 0.07	0.47%
1/25/2018	14,025,818	€ 15.78	-€ 0.12	-0.75%
1/26/2018	10,467,369	€ 15.69	-€ 0.08	-0.53%
1/29/2018	12,620,593	€ 15.45	-€ 0.24	-1.55%
1/30/2018	23,494,357	€ 14.82	-€ 0.63	-4.09%
1/31/2018	17,631,507	€ 14.80	-€ 0.01	-0.09%
2/1/2018	16,537,890	€ 14.84	€ 0.03	0.23%
2/2/2018	45,476,248	€ 13.71	-€ 1.13	-7.60%
2/5/2018	23,827,528	€ 13.22	-€ 0.49	-3.60%
2/6/2018	33,901,668	€ 13.35	€ 0.13	0.98%
2/7/2018	38,567,252	€ 13.13	-€ 0.22	-1.62%
2/8/2018	26,766,426	€ 12.67	-€ 0.46	-3.50%
2/9/2018	34,426,458	€ 12.71	€ 0.04	0.35%
2/12/2018	29,198,389	€ 13.06	€ 0.35	2.72%
2/13/2018	16,107,078	€ 12.88	-€ 0.18	-1.38%
2/14/2018	20,952,643	€ 13.02	€ 0.14	1.06%
2/15/2018	17,973,556	€ 12.91	-€ 0.11	-0.81%
2/16/2018	17,105,881	€ 12.93	€ 0.02	0.17%
2/19/2018	12,615,891	€ 13.25	€ 0.31	2.43%
2/20/2018	14,195,171	€ 13.35	€ 0.10	0.77%
2/21/2018	14,700,637	€ 13.50	€ 0.15	1.14%
2/22/2018	12,116,606	€ 13.34	-€ 0.16	-1.17%
2/23/2018	7,896,459	€ 13.34	€ 0.00	0.00%
2/26/2018	8,332,547	€ 13.35	€ 0.00	0.03%
2/27/2018	9,750,855	€ 13.40	€ 0.06	0.43%
2/28/2018	10,377,709	€ 13.08	-€ 0.32	-2.42%
3/1/2018	16,798,217	€ 12.79	-€ 0.29	-2.19%
3/2/2018	18,167,091	€ 12.76	-€ 0.03	-0.23%
3/5/2018	16,104,713	€ 12.90	€ 0.14	1.07%
3/6/2018	13,131,160	€ 12.91	€ 0.01	0.05%
3/7/2018	12,696,166	€ 13.12	€ 0.21	1.66%
3/8/2018	11,633,156	€ 13.09	-€ 0.03	-0.23%
3/9/2018	9,803,227	€ 13.08	-€ 0.01	-0.05%
3/12/2018	8,969,757	€ 13.01	-€ 0.08	-0.58%
3/13/2018	12,360,751	€ 12.80	-€ 0.21	-1.61%
3/14/2018	11,237,158	€ 12.68	-€ 0.12	-0.94%
3/15/2018	10,960,416	€ 12.78	€ 0.10	0.79%
3/16/2018	24,666,833	€ 12.84	€ 0.06	0.47%
3/19/2018	11,821,510	€ 12.59	-€ 0.25	-1.92%
3/20/2018	8,512,469	€ 12.68	€ 0.09	0.68%
3/21/2018	36,302,556	€ 12.05	-€ 0.63	-4.95%
3/22/2018	27,006,264	€ 11.53	-€ 0.52	-4.35%
3/23/2018	35,076,721	€ 11.13	-€ 0.39	-3.40%
3/26/2018	17,558,114	€ 11.29	€ 0.16	1.40%
3/27/2018	17,900,227	€ 11.13	-€ 0.16	-1.42%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
3/28/2018	17,215,555	€ 11.17	€ 0.04	0.36%
3/29/2018	16,124,458	€ 11.38	€ 0.21	1.90%
4/3/2018	14,891,104	€ 11.16	-€ 0.22	-1.92%
4/4/2018	19,103,091	€ 11.28	€ 0.11	1.02%
4/5/2018	18,693,396	€ 11.68	€ 0.40	3.55%
4/6/2018	14,706,322	€ 11.28	-€ 0.40	-3.39%
4/9/2018	19,065,076	€ 11.40	€ 0.12	1.05%
4/10/2018	14,937,707	€ 11.40	€ 0.00	-0.02%
4/11/2018	12,655,459	€ 11.48	€ 0.08	0.74%
4/12/2018	9,083,487	€ 11.65	€ 0.17	1.50%
4/13/2018	12,395,413	€ 11.63	-€ 0.02	-0.19%
4/16/2018	9,408,920	€ 11.58	-€ 0.05	-0.43%
4/17/2018	9,330,744	€ 11.62	€ 0.04	0.33%
4/18/2018	7,823,494	€ 11.68	€ 0.06	0.48%
4/19/2018	8,708,878	€ 11.68	€ 0.00	0.00%
4/20/2018	14,953,980	€ 11.57	-€ 0.11	-0.92%
4/23/2018	9,710,725	€ 11.65	€ 0.09	0.74%
4/24/2018	22,095,997	€ 12.05	€ 0.40	3.43%
4/25/2018	16,522,089	€ 11.98	-€ 0.07	-0.61%
4/26/2018	25,650,156	€ 11.84	-€ 0.14	-1.17%
4/27/2018	25,338,212	€ 11.42	-€ 0.42	-3.53%
4/30/2018	10,719,901	€ 11.32	-€ 0.11	-0.93%
5/2/2018	11,685,149	€ 11.39	€ 0.07	0.62%
5/3/2018	13,331,735	€ 11.33	-€ 0.06	-0.49%
5/4/2018	11,222,122	€ 11.53	€ 0.20	1.77%
5/7/2018	8,382,058	€ 11.52	-€ 0.01	-0.10%
5/8/2018	10,777,526	€ 11.43	-€ 0.09	-0.78%
5/9/2018	8,806,090	€ 11.60	€ 0.17	1.49%
5/10/2018	6,617,670	€ 11.61	€ 0.02	0.14%
5/11/2018	7,838,010	€ 11.59	-€ 0.02	-0.17%
5/14/2018	11,621,207	€ 11.43	-€ 0.17	-1.45%
5/15/2018	16,156,535	€ 11.22	-€ 0.21	-1.80%
5/16/2018	22,251,271	€ 10.99	-€ 0.23	-2.05%
5/17/2018	11,999,723	€ 10.99	€ 0.00	0.02%
5/18/2018	19,409,993	€ 10.79	-€ 0.20	-1.80%
5/21/2018	759	€ 10.82	€ 0.03	0.28%
5/22/2018	16,984,605	€ 11.00	€ 0.18	1.64%
5/23/2018	18,825,025	€ 10.97	-€ 0.03	-0.29%
5/24/2018	40,670,859	€ 10.53	-€ 0.44	-3.97%
5/25/2018	22,121,668	€ 10.38	-€ 0.15	-1.46%
5/28/2018	13,875,706	€ 10.32	-€ 0.06	-0.58%
5/29/2018	46,171,255	€ 9.79	-€ 0.53	-5.10%
5/30/2018	32,857,907	€ 9.91	€ 0.12	1.18%
5/31/2018	61,774,652	€ 9.49	-€ 0.42	-4.24%
6/1/2018	38,335,966	€ 9.48	-€ 0.01	-0.07%
6/4/2018	23,002,995	€ 9.58	€ 0.09	0.97%
6/5/2018	25,627,060	€ 9.40	-€ 0.17	-1.83%
6/6/2018	23,332,007	€ 9.59	€ 0.19	1.97%
6/7/2018	22,646,943	€ 9.76	€ 0.17	1.78%
6/8/2018	18,969,590	€ 9.58	-€ 0.18	-1.85%
6/11/2018	16,530,671	€ 9.70	€ 0.12	1.29%
6/12/2018	13,122,557	€ 9.66	-€ 0.04	-0.44%
6/13/2018	14,327,393	€ 9.63	-€ 0.02	-0.25%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
6/14/2018	19,240,710	€ 9.66	€ 0.03	0.30%
6/15/2018	39,199,211	€ 9.52	-€ 0.14	-1.43%
6/18/2018	14,505,601	€ 9.53	€ 0.01	0.10%
6/19/2018	18,369,477	€ 9.59	€ 0.06	0.61%
6/20/2018	16,590,587	€ 9.59	€ 0.00	-0.04%
6/21/2018	18,833,119	€ 9.36	-€ 0.23	-2.38%
6/22/2018	10,813,294	€ 9.45	€ 0.09	0.96%
6/25/2018	13,649,309	€ 9.28	-€ 0.17	-1.81%
6/26/2018	12,752,452	€ 9.22	-€ 0.06	-0.66%
6/27/2018	32,787,063	€ 8.97	-€ 0.24	-2.65%
6/28/2018	17,608,164	€ 9.09	€ 0.11	1.25%
6/29/2018	24,963,167	€ 9.13	€ 0.04	0.46%
7/2/2018	16,620,851	€ 9.14	€ 0.01	0.11%
7/3/2018	13,740,612	€ 9.25	€ 0.11	1.18%
7/4/2018	11,057,493	€ 9.36	€ 0.11	1.20%
7/5/2018	20,914,629	€ 9.54	€ 0.19	1.99%
7/6/2018	37,544,705	€ 9.79	€ 0.25	2.58%
7/9/2018	14,304,739	€ 9.78	-€ 0.01	-0.12%
7/10/2018	14,421,919	€ 9.72	-€ 0.06	-0.59%
7/11/2018	14,562,320	€ 9.56	-€ 0.16	-1.63%
7/12/2018	11,713,421	€ 9.59	€ 0.03	0.28%
7/13/2018	17,963,098	€ 9.61	€ 0.02	0.20%
7/16/2018	44,468,277	€ 10.38	€ 0.77	8.05%
7/17/2018	22,549,769	€ 10.16	-€ 0.22	-2.14%
7/18/2018	14,616,007	€ 10.35	€ 0.19	1.89%
7/19/2018	12,414,233	€ 10.32	-€ 0.03	-0.25%
7/20/2018	16,871,500	€ 10.25	-€ 0.07	-0.68%
7/23/2018	10,503,208	€ 10.37	€ 0.12	1.17%
7/24/2018	14,436,832	€ 10.52	€ 0.14	1.37%
7/25/2018	14,580,749	€ 10.35	-€ 0.16	-1.56%
7/26/2018	16,305,896	€ 10.47	€ 0.11	1.10%
7/27/2018	12,170,045	€ 10.60	€ 0.13	1.26%
7/30/2018	15,731,808	€ 10.92	€ 0.32	3.02%
7/31/2018	22,200,027	€ 11.18	€ 0.27	2.44%
8/1/2018	12,159,208	€ 11.12	-€ 0.07	-0.61%
8/2/2018	16,814,667	€ 10.79	-€ 0.32	-2.90%
8/3/2018	9,983,918	€ 10.80	€ 0.01	0.07%
8/6/2018	8,676,958	€ 10.81	€ 0.01	0.09%
8/7/2018	9,918,388	€ 10.90	€ 0.08	0.78%
8/8/2018	12,848,847	€ 10.78	-€ 0.12	-1.10%
8/9/2018	8,059,694	€ 10.74	-€ 0.03	-0.32%
8/10/2018	27,219,458	€ 10.32	-€ 0.42	-3.89%
8/13/2018	19,347,314	€ 10.06	-€ 0.26	-2.54%
8/14/2018	13,144,766	€ 10.10	€ 0.03	0.34%
8/15/2018	19,343,096	€ 9.83	-€ 0.26	-2.60%
8/16/2018	11,673,403	€ 9.86	€ 0.03	0.28%
8/17/2018	14,575,255	€ 9.78	-€ 0.08	-0.85%
8/20/2018	8,871,539	€ 9.77	-€ 0.01	-0.06%
8/21/2018	10,852,935	€ 9.97	€ 0.20	2.04%
8/22/2018	9,895,002	€ 10.00	€ 0.03	0.30%
8/23/2018	9,933,279	€ 9.81	-€ 0.19	-1.89%
8/24/2018	8,363,307	€ 9.80	-€ 0.01	-0.10%
8/27/2018	9,519,911	€ 10.03	€ 0.23	2.32%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
8/28/2018	10,392,907	€ 9.86	-€ 0.16	-1.64%
8/29/2018	10,088,279	€ 9.95	€ 0.09	0.89%
8/30/2018	10,652,844	€ 9.73	-€ 0.22	-2.25%
8/31/2018	11,867,573	€ 9.69	-€ 0.04	-0.39%
9/3/2018	9,163,887	€ 9.75	€ 0.06	0.65%
9/4/2018	13,269,452	€ 9.84	€ 0.09	0.91%
9/5/2018	15,425,901	€ 9.88	€ 0.04	0.39%
9/6/2018	12,334,882	€ 9.77	-€ 0.12	-1.16%
9/7/2018	19,471,453	€ 9.60	-€ 0.17	-1.69%
9/10/2018	12,441,266	€ 9.59	-€ 0.01	-0.16%
9/11/2018	16,665,304	€ 9.67	€ 0.08	0.89%
9/12/2018	12,634,169	€ 9.64	-€ 0.03	-0.31%
9/13/2018	15,746,882	€ 9.73	€ 0.09	0.91%
9/14/2018	13,510,779	€ 9.81	€ 0.08	0.80%
9/17/2018	11,046,677	€ 9.86	€ 0.05	0.50%
9/18/2018	9,937,575	€ 9.92	€ 0.06	0.66%
9/19/2018	18,635,020	€ 10.23	€ 0.31	3.10%
9/20/2018	18,787,508	€ 10.40	€ 0.17	1.68%
9/21/2018	111,145,491	€ 10.50	€ 0.10	0.96%
9/24/2018	12,872,455	€ 10.41	-€ 0.09	-0.82%
9/25/2018	10,426,864	€ 10.33	-€ 0.09	-0.83%
9/26/2018	9,923,223	€ 10.15	-€ 0.18	-1.74%
9/27/2018	11,126,604	€ 10.14	-€ 0.01	-0.12%
9/28/2018	22,496,989	€ 9.76	-€ 0.37	-3.67%
10/1/2018	12,663,970	€ 9.73	-€ 0.04	-0.37%
10/2/2018	14,156,649	€ 9.62	-€ 0.11	-1.08%
10/3/2018	564	€ 9.74	€ 0.11	1.16%
10/4/2018	15,366,551	€ 9.72	-€ 0.02	-0.18%
10/5/2018	12,897,293	€ 9.67	-€ 0.04	-0.44%
10/8/2018	12,120,441	€ 9.59	-€ 0.09	-0.89%
10/9/2018	10,323,028	€ 9.60	€ 0.01	0.07%
10/10/2018	13,602,695	€ 9.48	-€ 0.11	-1.16%
10/11/2018	18,463,573	€ 9.35	-€ 0.13	-1.41%
10/12/2018	11,161,063	€ 9.38	€ 0.03	0.31%
10/15/2018	9,335,729	€ 9.54	€ 0.16	1.67%
10/16/2018	11,776,071	€ 9.64	€ 0.10	1.07%
10/17/2018	12,876,541	€ 9.79	€ 0.15	1.54%
10/18/2018	11,862,581	€ 9.57	-€ 0.21	-2.19%
10/19/2018	17,903,067	€ 9.51	-€ 0.07	-0.69%
10/22/2018	11,877,836	€ 9.35	-€ 0.16	-1.64%
10/23/2018	13,630,790	€ 9.33	-€ 0.02	-0.22%
10/24/2018	27,528,937	€ 8.78	-€ 0.55	-5.84%
10/25/2018	20,470,672	€ 8.77	-€ 0.02	-0.18%
10/26/2018	22,093,955	€ 8.50	-€ 0.27	-3.06%
10/29/2018	12,711,938	€ 8.47	-€ 0.04	-0.41%
10/30/2018	11,441,423	€ 8.60	€ 0.14	1.59%
10/31/2018	11,286,463	€ 8.65	€ 0.05	0.58%
11/1/2018	20,484,515	€ 8.99	€ 0.34	3.93%
11/2/2018	20,681,951	€ 9.22	€ 0.23	2.56%
11/5/2018	9,118,345	€ 9.18	-€ 0.04	-0.41%
11/6/2018	9,332,168	€ 9.11	-€ 0.07	-0.76%
11/7/2018	10,543,591	€ 9.25	€ 0.14	1.55%
11/8/2018	10,743,677	€ 9.09	-€ 0.17	-1.78%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
11/9/2018	13,263,809	€ 8.93	-€ 0.16	-1.75%
11/12/2018	12,424,418	€ 8.67	-€ 0.26	-2.90%
11/13/2018	10,689,283	€ 8.75	€ 0.07	0.87%
11/14/2018	8,859,724	€ 8.69	-€ 0.05	-0.58%
11/15/2018	12,350,482	€ 8.70	€ 0.01	0.09%
11/16/2018	12,966,202	€ 8.63	-€ 0.07	-0.82%
11/19/2018	8,600,744	€ 8.52	-€ 0.11	-1.26%
11/20/2018	25,779,628	€ 8.12	-€ 0.40	-4.71%
11/21/2018	11,507,809	€ 8.29	€ 0.16	2.02%
11/22/2018	8,445,708	€ 8.24	-€ 0.05	-0.60%
11/23/2018	8,986,392	€ 8.18	-€ 0.05	-0.67%
11/26/2018	15,141,015	€ 8.59	€ 0.41	4.96%
11/27/2018	9,697,641	€ 8.68	€ 0.10	1.14%
11/28/2018	8,212,168	€ 8.63	-€ 0.05	-0.59%
11/29/2018	22,123,398	€ 8.31	-€ 0.32	-3.74%
11/30/2018	19,531,247	€ 8.11	-€ 0.20	-2.38%
12/3/2018	13,871,547	€ 8.30	€ 0.19	2.32%
12/4/2018	11,670,826	€ 8.02	-€ 0.28	-3.42%
12/5/2018	13,330,900	€ 8.08	€ 0.06	0.74%
12/6/2018	26,590,288	€ 7.85	-€ 0.22	-2.75%
12/7/2018	14,091,605	€ 7.66	-€ 0.19	-2.46%
12/10/2018	25,173,600	€ 7.36	-€ 0.30	-3.92%
12/11/2018	15,863,623	€ 7.38	€ 0.02	0.31%
12/12/2018	24,214,600	€ 7.96	€ 0.58	7.82%
12/13/2018	18,491,157	€ 7.82	-€ 0.14	-1.75%
12/14/2018	10,639,976	€ 7.78	-€ 0.04	-0.52%
12/17/2018	12,599,969	€ 7.57	-€ 0.21	-2.70%
12/18/2018	12,225,094	€ 7.65	€ 0.08	1.02%
12/19/2018	12,040,408	€ 7.38	-€ 0.27	-3.49%
12/20/2018	29,026,478	€ 7.01	-€ 0.37	-5.01%
12/21/2018	39,218,100	€ 6.92	-€ 0.09	-1.27%
12/27/2018	18,371,509	€ 6.78	-€ 0.14	-1.98%
12/28/2018	9,935,335	€ 6.97	€ 0.18	2.70%
1/2/2019	17,145,119	€ 7.18	€ 0.22	3.11%
1/3/2019	12,637,930	€ 7.10	-€ 0.09	-1.22%
1/4/2019	16,807,304	€ 7.46	€ 0.36	5.06%
1/7/2019	12,404,238	€ 7.56	€ 0.11	1.46%
1/8/2019	14,683,543	€ 7.66	€ 0.09	1.24%
1/9/2019	16,349,803	€ 7.43	-€ 0.23	-2.98%
1/10/2019	12,788,136	€ 7.49	€ 0.06	0.82%
1/11/2019	13,288,039	€ 7.46	-€ 0.03	-0.44%
1/14/2019	12,076,415	€ 7.46	€ 0.00	0.00%
1/15/2019	14,745,684	€ 7.52	€ 0.06	0.79%
1/16/2019	22,365,550	€ 8.15	€ 0.63	8.35%
1/17/2019	22,240,556	€ 7.80	-€ 0.34	-4.22%
1/18/2019	22,490,706	€ 8.01	€ 0.21	2.68%
1/21/2019	7,534,732	€ 7.98	-€ 0.03	-0.35%
1/22/2019	12,745,008	€ 7.79	-€ 0.20	-2.46%
1/23/2019	13,757,801	€ 7.93	€ 0.14	1.85%
1/24/2019	17,020,089	€ 7.81	-€ 0.12	-1.56%
1/25/2019	15,418,774	€ 8.10	€ 0.30	3.79%
1/28/2019	12,611,814	€ 8.11	€ 0.01	0.12%
1/29/2019	10,014,140	€ 8.08	-€ 0.03	-0.35%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
1/30/2019	10,322,370	€ 8.08	€ 0.00	-0.02%
1/31/2019	24,814,888	€ 7.74	-€ 0.34	-4.19%
2/1/2019	22,572,208	€ 7.73	-€ 0.01	-0.17%
2/4/2019	13,129,652	€ 7.66	-€ 0.07	-0.88%
2/5/2019	11,311,273	€ 7.79	€ 0.13	1.68%
2/6/2019	10,493,413	€ 7.88	€ 0.09	1.12%
2/7/2019	21,399,610	€ 7.40	-€ 0.48	-6.05%
2/8/2019	16,791,677	€ 7.22	-€ 0.18	-2.42%
2/11/2019	10,864,706	€ 7.36	€ 0.14	1.97%
2/12/2019	9,972,238	€ 7.53	€ 0.17	2.25%
2/13/2019	9,533,596	€ 7.56	€ 0.03	0.40%
2/14/2019	12,095,566	€ 7.39	-€ 0.17	-2.25%
2/15/2019	20,720,399	€ 7.75	€ 0.36	4.90%
2/18/2019	6,859,758	€ 7.76	€ 0.01	0.10%
2/19/2019	11,876,896	€ 7.58	-€ 0.18	-2.31%
2/20/2019	8,524,171	€ 7.68	€ 0.10	1.36%
2/21/2019	10,262,398	€ 7.62	-€ 0.07	-0.90%
2/22/2019	9,625,356	€ 7.62	€ 0.01	0.08%
2/25/2019	9,252,950	€ 7.72	€ 0.10	1.31%
2/26/2019	9,991,519	€ 7.81	€ 0.09	1.18%
2/27/2019	16,204,036	€ 8.00	€ 0.19	2.46%
2/28/2019	17,017,077	€ 8.13	€ 0.13	1.57%
3/1/2019	12,605,024	€ 8.18	€ 0.05	0.62%
3/4/2019	8,171,309	€ 8.08	-€ 0.10	-1.20%
3/5/2019	11,007,134	€ 8.07	-€ 0.02	-0.20%
3/6/2019	11,102,831	€ 8.11	€ 0.04	0.50%
3/7/2019	21,355,080	€ 7.75	-€ 0.36	-4.39%
3/8/2019	13,839,934	€ 7.69	-€ 0.06	-0.72%
3/11/2019	19,123,764	€ 8.09	€ 0.39	5.11%
3/12/2019	17,129,533	€ 7.86	-€ 0.23	-2.83%
3/13/2019	8,749,234	€ 7.94	€ 0.08	1.06%
3/14/2019	10,161,834	€ 7.87	-€ 0.07	-0.88%
3/15/2019	22,072,213	€ 7.80	-€ 0.07	-0.89%
3/18/2019	25,430,273	€ 8.12	€ 0.32	4.09%
3/19/2019	15,252,556	€ 7.94	-€ 0.18	-2.18%
3/20/2019	14,099,612	€ 7.68	-€ 0.26	-3.32%
3/21/2019	18,884,615	€ 7.45	-€ 0.23	-3.01%
3/22/2019	18,636,218	€ 7.27	-€ 0.18	-2.46%
3/25/2019	12,673,719	€ 7.22	-€ 0.04	-0.56%
3/26/2019	12,926,380	€ 7.33	€ 0.11	1.50%
3/27/2019	18,200,357	€ 7.50	€ 0.17	2.33%
3/28/2019	18,346,127	€ 7.27	-€ 0.23	-3.07%
3/29/2019	12,307,911	€ 7.24	-€ 0.03	-0.40%
4/1/2019	14,456,862	€ 7.59	€ 0.34	4.75%
4/2/2019	10,697,137	€ 7.61	€ 0.02	0.25%
4/3/2019	14,607,043	€ 7.63	€ 0.02	0.25%
4/4/2019	17,179,466	€ 7.58	-€ 0.04	-0.55%
4/5/2019	13,185,309	€ 7.45	-€ 0.13	-1.77%
4/8/2019	13,266,775	€ 7.38	-€ 0.07	-0.97%
4/9/2019	10,289,428	€ 7.30	-€ 0.08	-1.10%
4/10/2019	11,408,609	€ 7.27	-€ 0.03	-0.38%
4/11/2019	17,478,392	€ 7.45	€ 0.18	2.49%
4/12/2019	18,252,716	€ 7.62	€ 0.17	2.31%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
4/15/2019	9,753,442	€ 7.64	€ 0.01	0.18%
4/16/2019	10,663,552	€ 7.83	€ 0.20	2.57%
4/17/2019	13,589,800	€ 7.89	€ 0.06	0.73%
4/18/2019	14,855,080	€ 7.78	-€ 0.11	-1.36%
4/23/2019	12,011,334	€ 7.61	-€ 0.17	-2.18%
4/24/2019	12,528,834	€ 7.62	€ 0.00	0.04%
4/25/2019	28,568,443	€ 7.52	-€ 0.10	-1.25%
4/26/2019	26,630,165	€ 7.34	-€ 0.18	-2.39%
4/29/2019	16,972,951	€ 7.42	€ 0.08	1.04%
4/30/2019	10,211,663	€ 7.36	-€ 0.06	-0.76%
5/2/2019	14,058,795	€ 7.38	€ 0.02	0.33%
5/3/2019	10,095,517	€ 7.34	-€ 0.04	-0.60%
5/6/2019	12,907,307	€ 7.22	-€ 0.12	-1.59%
5/7/2019	17,008,947	€ 7.01	-€ 0.21	-2.91%
5/8/2019	14,273,409	€ 7.03	€ 0.02	0.29%
5/9/2019	18,625,121	€ 6.92	-€ 0.12	-1.68%
5/10/2019	14,981,213	€ 7.01	€ 0.09	1.33%
5/13/2019	12,784,066	€ 6.79	-€ 0.22	-3.14%
5/14/2019	10,491,242	€ 6.86	€ 0.07	1.08%
5/15/2019	15,141,566	€ 6.85	-€ 0.01	-0.10%
5/16/2019	12,081,422	€ 6.87	€ 0.01	0.18%
5/17/2019	14,895,787	€ 6.80	-€ 0.06	-0.90%
5/20/2019	17,949,553	€ 6.65	-€ 0.15	-2.25%
5/21/2019	14,569,267	€ 6.75	€ 0.10	1.44%
5/22/2019	13,848,437	€ 6.61	-€ 0.13	-1.97%
5/23/2019	23,675,550	€ 6.50	-€ 0.11	-1.71%
5/24/2019	13,621,836	€ 6.40	-€ 0.10	-1.58%
5/27/2019	9,952,396	€ 6.49	€ 0.10	1.50%
5/28/2019	18,915,875	€ 6.30	-€ 0.19	-2.97%
5/29/2019	16,419,904	€ 6.18	-€ 0.12	-1.89%
5/30/2019	10,167,677	€ 6.17	-€ 0.01	-0.23%
5/31/2019	17,476,295	€ 6.05	-€ 0.12	-1.93%
6/3/2019	23,651,675	€ 5.99	-€ 0.06	-0.98%
6/4/2019	19,743,716	€ 6.24	€ 0.25	4.11%
6/5/2019	12,840,860	€ 6.13	-€ 0.10	-1.65%
6/6/2019	20,797,030	€ 5.98	-€ 0.15	-2.48%
6/7/2019	11,069,108	€ 5.98	€ 0.00	0.05%
6/10/2019	3,624	€ 6.10	€ 0.12	1.92%
6/11/2019	15,357,419	€ 6.16	€ 0.06	0.93%
6/12/2019	13,320,975	€ 6.10	-€ 0.05	-0.83%
6/13/2019	11,222,654	€ 6.10	€ 0.00	-0.03%
6/14/2019	9,590,271	€ 6.06	-€ 0.04	-0.72%
6/17/2019	15,068,449	€ 6.08	€ 0.02	0.36%
6/18/2019	22,688,516	€ 6.30	€ 0.22	3.62%
6/19/2019	16,780,423	€ 6.41	€ 0.11	1.75%
6/20/2019	15,313,525	€ 6.35	-€ 0.06	-0.87%
6/21/2019	36,168,130	€ 6.31	-€ 0.04	-0.66%
6/24/2019	11,920,019	€ 6.23	-€ 0.08	-1.25%
6/25/2019	7,740,833	€ 6.24	€ 0.01	0.11%
6/26/2019	16,616,984	€ 6.48	€ 0.24	3.91%
6/27/2019	13,321,596	€ 6.61	€ 0.13	1.94%
6/28/2019	21,218,792	€ 6.70	€ 0.09	1.41%
7/1/2019	17,001,625	€ 6.76	€ 0.06	0.88%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
7/2/2019	9,683,636	€ 6.72	-€ 0.04	-0.62%
7/3/2019	15,661,010	€ 6.94	€ 0.22	3.23%
7/4/2019	11,378,059	€ 7.00	€ 0.06	0.92%
7/5/2019	23,091,315	€ 7.16	€ 0.15	2.21%
7/8/2019	43,570,802	€ 6.73	-€ 0.42	-5.90%
7/9/2019	27,691,313	€ 6.52	-€ 0.22	-3.21%
7/10/2019	19,153,276	€ 6.57	€ 0.05	0.81%
7/11/2019	13,865,393	€ 6.64	€ 0.07	1.07%
7/12/2019	16,072,281	€ 6.79	€ 0.15	2.24%
7/15/2019	14,756,486	€ 6.91	€ 0.12	1.74%
7/16/2019	18,760,797	€ 7.11	€ 0.21	2.97%
7/17/2019	13,894,559	€ 7.02	-€ 0.10	-1.38%
7/18/2019	12,744,689	€ 7.02	€ 0.00	0.00%
7/19/2019	14,062,410	€ 6.89	-€ 0.12	-1.74%
7/22/2019	9,369,495	€ 6.93	€ 0.04	0.51%
7/23/2019	12,704,155	€ 7.13	€ 0.20	2.87%
7/24/2019	25,364,688	€ 7.10	-€ 0.02	-0.32%
7/25/2019	30,088,460	€ 7.12	€ 0.01	0.17%
7/26/2019	15,362,840	€ 7.12	€ 0.00	0.06%
7/29/2019	8,171,743	€ 7.05	-€ 0.07	-0.98%
7/30/2019	19,519,652	€ 6.91	-€ 0.14	-1.99%
7/31/2019	19,316,382	€ 7.07	€ 0.16	2.37%
8/1/2019	12,793,241	€ 6.85	-€ 0.22	-3.17%
8/2/2019	23,462,381	€ 7.07	€ 0.22	3.24%
8/5/2019	19,499,916	€ 6.84	-€ 0.23	-3.28%
8/6/2019	15,356,258	€ 6.82	-€ 0.02	-0.37%
8/7/2019	23,157,980	€ 6.67	-€ 0.15	-2.13%
8/8/2019	17,598,794	€ 6.84	€ 0.17	2.55%
8/9/2019	17,923,546	€ 6.72	-€ 0.13	-1.83%
8/12/2019	18,762,970	€ 6.20	-€ 0.52	-7.67%
8/13/2019	23,960,183	€ 6.43	€ 0.23	3.68%
8/14/2019	23,078,973	€ 6.03	-€ 0.40	-6.16%
8/15/2019	25,728,341	€ 5.82	-€ 0.21	-3.51%
8/16/2019	37,870,289	€ 6.23	€ 0.41	7.08%
8/19/2019	17,244,795	€ 6.34	€ 0.11	1.77%
8/20/2019	12,298,576	€ 6.28	-€ 0.06	-1.01%
8/21/2019	10,034,677	€ 6.34	€ 0.06	0.94%
8/22/2019	12,545,660	€ 6.45	€ 0.12	1.83%
8/23/2019	15,718,124	€ 6.26	-€ 0.19	-2.99%
8/26/2019	8,224,799	€ 6.37	€ 0.11	1.71%
8/27/2019	11,310,557	€ 6.43	€ 0.06	0.97%
8/28/2019	10,065,898	€ 6.45	€ 0.02	0.31%
8/29/2019	12,523,220	€ 6.53	€ 0.08	1.18%
8/30/2019	11,437,836	€ 6.57	€ 0.05	0.75%
9/2/2019	6,792,934	€ 6.63	€ 0.06	0.90%
9/3/2019	10,656,437	€ 6.62	-€ 0.01	-0.17%
9/4/2019	10,425,200	€ 6.76	€ 0.14	2.08%
9/5/2019	18,171,091	€ 7.09	€ 0.33	4.84%
9/6/2019	16,389,849	€ 7.09	€ 0.00	0.03%
9/9/2019	16,647,588	€ 7.36	€ 0.27	3.75%
9/10/2019	23,641,806	€ 7.49	€ 0.13	1.81%
9/11/2019	21,456,374	€ 7.49	€ 0.01	0.08%
9/12/2019	30,969,750	€ 7.49	€ 0.00	-0.07%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
9/13/2019	20,466,493	€ 7.60	€ 0.12	1.54%
9/16/2019	15,830,054	€ 7.48	-€ 0.13	-1.64%
9/17/2019	14,569,688	€ 7.40	-€ 0.08	-1.11%
9/18/2019	10,714,818	€ 7.27	-€ 0.12	-1.66%
9/19/2019	12,511,082	€ 7.31	€ 0.04	0.55%
9/20/2019	19,787,438	€ 7.25	-€ 0.06	-0.86%
9/23/2019	17,485,311	€ 7.08	-€ 0.17	-2.34%
9/24/2019	10,678,219	€ 6.86	-€ 0.22	-3.11%
9/25/2019	16,810,429	€ 6.91	€ 0.05	0.74%
9/26/2019	15,774,690	€ 6.78	-€ 0.13	-1.90%
9/27/2019	10,911,739	€ 6.91	€ 0.13	1.89%
9/30/2019	10,332,726	€ 6.86	-€ 0.05	-0.68%
10/1/2019	13,588,529	€ 6.64	-€ 0.22	-3.19%
10/2/2019	15,641,405	€ 6.56	-€ 0.08	-1.20%
10/3/2019	3,339	€ 6.51	-€ 0.06	-0.84%
10/4/2019	16,176,606	€ 6.53	€ 0.02	0.35%
10/7/2019	11,230,862	€ 6.45	-€ 0.08	-1.18%
10/8/2019	13,964,758	€ 6.31	-€ 0.15	-2.25%
10/9/2019	8,740,070	€ 6.32	€ 0.01	0.16%
10/10/2019	15,979,535	€ 6.47	€ 0.15	2.41%
10/11/2019	17,866,340	€ 6.79	€ 0.32	4.96%
10/14/2019	11,582,167	€ 6.84	€ 0.05	0.75%
10/15/2019	15,025,107	€ 7.04	€ 0.20	2.88%
10/16/2019	18,364,468	€ 7.09	€ 0.05	0.70%
10/17/2019	18,242,735	€ 7.12	€ 0.03	0.38%
10/18/2019	14,740,963	€ 7.09	-€ 0.03	-0.41%
10/21/2019	16,562,068	€ 7.26	€ 0.17	2.46%
10/22/2019	13,938,186	€ 7.12	-€ 0.14	-1.96%
10/23/2019	10,083,045	€ 7.18	€ 0.06	0.83%
10/24/2019	12,615,315	€ 7.12	-€ 0.06	-0.85%
10/25/2019	7,904,229	€ 7.15	€ 0.04	0.51%
10/28/2019	11,028,745	€ 7.23	€ 0.08	1.08%
10/29/2019	9,258,317	€ 7.18	-€ 0.05	-0.71%
10/30/2019	39,552,584	€ 6.65	-€ 0.53	-7.43%
10/31/2019	19,692,546	€ 6.49	-€ 0.16	-2.36%
11/1/2019	12,613,357	€ 6.61	€ 0.13	1.93%
11/4/2019	16,271,998	€ 6.89	€ 0.28	4.23%
11/5/2019	14,869,383	€ 6.90	€ 0.01	0.09%
11/6/2019	18,193,425	€ 6.89	-€ 0.01	-0.16%
11/7/2019	15,892,544	€ 7.04	€ 0.16	2.26%
11/8/2019	15,136,435	€ 6.91	-€ 0.14	-1.92%
11/11/2019	11,240,371	€ 6.87	-€ 0.04	-0.51%
11/12/2019	11,053,184	€ 6.93	€ 0.06	0.86%
11/13/2019	19,076,796	€ 6.65	-€ 0.29	-4.14%
11/14/2019	12,380,571	€ 6.54	-€ 0.11	-1.58%
11/15/2019	12,029,013	€ 6.60	€ 0.05	0.83%
11/18/2019	9,898,511	€ 6.62	€ 0.03	0.39%
11/19/2019	10,052,967	€ 6.59	-€ 0.03	-0.42%
11/20/2019	10,708,550	€ 6.56	-€ 0.03	-0.49%
11/21/2019	9,213,689	€ 6.66	€ 0.09	1.45%
11/22/2019	13,193,207	€ 6.68	€ 0.02	0.35%
11/25/2019	9,159,838	€ 6.69	€ 0.01	0.10%
11/26/2019	9,441,366	€ 6.60	-€ 0.08	-1.24%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
11/27/2019	11,438,294	€ 6.68	€ 0.07	1.09%
11/28/2019	5,300,364	€ 6.62	-€ 0.06	-0.87%
11/29/2019	8,208,917	€ 6.57	-€ 0.05	-0.76%
12/2/2019	16,791,754	€ 6.46	-€ 0.11	-1.64%
12/3/2019	13,908,761	€ 6.38	-€ 0.08	-1.29%
12/4/2019	13,448,853	€ 6.49	€ 0.11	1.79%
12/5/2019	9,027,126	€ 6.46	-€ 0.03	-0.42%
12/6/2019	8,826,912	€ 6.51	€ 0.05	0.73%
12/9/2019	10,449,110	€ 6.53	€ 0.02	0.35%
12/10/2019	14,381,442	€ 6.47	-€ 0.06	-0.92%
12/11/2019	10,133,994	€ 6.53	€ 0.06	0.91%
12/12/2019	21,635,988	€ 6.79	€ 0.26	3.98%
12/13/2019	22,741,422	€ 6.71	-€ 0.08	-1.18%
12/16/2019	15,367,630	€ 6.91	€ 0.20	2.91%
12/17/2019	11,191,404	€ 6.98	€ 0.07	1.07%
12/18/2019	10,486,810	€ 6.97	-€ 0.01	-0.11%
12/19/2019	14,282,543	€ 7.07	€ 0.10	1.41%
12/20/2019	30,878,007	€ 7.01	-€ 0.06	-0.82%
12/23/2019	10,271,284	€ 6.91	-€ 0.10	-1.47%
12/27/2019	8,207,348	€ 6.88	-€ 0.03	-0.41%
12/30/2019	5,439,831	€ 6.92	€ 0.04	0.51%
1/2/2020	24,456,747	€ 7.42	€ 0.51	7.32%
1/3/2020	13,738,994	€ 7.25	-€ 0.17	-2.28%
1/6/2020	15,267,733	€ 7.18	-€ 0.07	-0.99%
1/7/2020	16,585,349	€ 7.40	€ 0.22	3.01%
1/8/2020	23,422,203	€ 7.71	€ 0.31	4.22%
1/9/2020	18,039,041	€ 7.72	€ 0.01	0.09%
1/10/2020	13,459,889	€ 7.67	-€ 0.05	-0.67%
1/13/2020	12,322,998	€ 7.59	-€ 0.08	-0.98%
1/14/2020	16,112,122	€ 7.70	€ 0.11	1.45%
1/15/2020	12,758,705	€ 7.54	-€ 0.16	-2.04%
1/16/2020	13,250,389	€ 7.65	€ 0.11	1.47%
1/17/2020	13,387,944	€ 7.61	-€ 0.05	-0.60%
1/20/2020	10,531,148	€ 7.43	-€ 0.18	-2.31%
1/21/2020	11,246,548	€ 7.45	€ 0.02	0.30%
1/22/2020	11,448,898	€ 7.56	€ 0.11	1.44%
1/23/2020	21,831,577	€ 7.73	€ 0.17	2.21%
1/24/2020	19,822,527	€ 7.75	€ 0.02	0.26%
1/27/2020	17,362,427	€ 7.72	-€ 0.03	-0.35%
1/28/2020	15,953,417	€ 7.84	€ 0.12	1.52%
1/29/2020	16,240,949	€ 7.96	€ 0.12	1.49%
1/30/2020	31,285,997	€ 8.40	€ 0.45	5.61%
1/31/2020	28,128,838	€ 8.23	-€ 0.17	-2.01%
2/3/2020	17,204,021	€ 8.12	-€ 0.11	-1.34%
2/4/2020	14,788,575	€ 8.16	€ 0.04	0.44%
2/5/2020	15,267,340	€ 8.26	€ 0.10	1.21%
2/6/2020	52,637,796	€ 9.44	€ 1.18	14.33%
2/7/2020	27,391,931	€ 9.48	€ 0.04	0.46%
2/10/2020	17,186,770	€ 9.40	-€ 0.08	-0.88%
2/11/2020	21,324,213	€ 9.63	€ 0.23	2.44%
2/12/2020	21,245,049	€ 9.96	€ 0.33	3.41%
2/13/2020	24,880,097	€ 10.18	€ 0.22	2.24%
2/14/2020	16,598,783	€ 10.16	-€ 0.02	-0.20%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
2/17/2020	12,115,310	€ 10.16	€ 0.00	-0.02%
2/18/2020	20,689,339	€ 9.93	-€ 0.23	-2.29%
2/19/2020	20,233,080	€ 9.86	-€ 0.07	-0.65%
2/20/2020	12,491,629	€ 9.86	€ 0.00	0.04%
2/21/2020	23,897,293	€ 9.42	-€ 0.44	-4.49%
2/24/2020	33,521,159	€ 8.88	-€ 0.54	-5.74%
2/25/2020	24,356,369	€ 8.58	-€ 0.30	-3.41%
2/26/2020	28,444,806	€ 8.70	€ 0.12	1.38%
2/27/2020	35,496,741	€ 8.21	-€ 0.48	-5.55%
2/28/2020	45,203,837	€ 7.83	-€ 0.38	-4.65%
3/2/2020	40,683,281	€ 7.69	-€ 0.14	-1.74%
3/3/2020	32,569,680	€ 7.29	-€ 0.41	-5.29%
3/4/2020	25,141,763	€ 7.39	€ 0.11	1.47%
3/5/2020	33,205,480	€ 6.89	-€ 0.50	-6.76%
3/6/2020	33,674,805	€ 6.70	-€ 0.19	-2.79%
3/9/2020	60,045,228	€ 5.90	-€ 0.80	-12.00%
3/10/2020	53,731,637	€ 6.20	€ 0.30	5.12%
3/11/2020	41,167,540	€ 5.79	-€ 0.41	-6.55%
3/12/2020	77,731,922	€ 4.96	-€ 0.84	-14.48%
3/13/2020	63,393,236	€ 5.37	€ 0.42	8.42%
3/16/2020	49,406,067	€ 4.80	-€ 0.57	-10.59%
3/17/2020	43,188,785	€ 5.20	€ 0.40	8.27%
3/18/2020	30,744,287	€ 5.10	-€ 0.10	-1.90%
3/19/2020	28,432,761	€ 5.49	€ 0.39	7.55%
3/20/2020	39,405,765	€ 5.31	-€ 0.17	-3.14%
3/23/2020	29,448,882	€ 5.55	€ 0.24	4.50%
3/24/2020	28,858,102	€ 6.11	€ 0.56	10.10%
3/25/2020	30,843,622	€ 6.31	€ 0.20	3.22%
3/26/2020	22,686,797	€ 6.30	-€ 0.01	-0.17%
3/27/2020	26,819,892	€ 5.80	-€ 0.50	-7.89%
3/30/2020	20,751,535	€ 5.89	€ 0.09	1.48%
3/31/2020	20,796,292	€ 5.81	-€ 0.08	-1.36%
4/1/2020	22,643,653	€ 5.49	-€ 0.32	-5.54%
4/2/2020	30,499,482	€ 5.55	€ 0.06	1.15%
4/3/2020	23,135,417	€ 5.45	-€ 0.10	-1.75%
4/6/2020	21,209,084	€ 5.89	€ 0.44	8.07%
4/7/2020	26,133,204	€ 6.08	€ 0.19	3.16%
4/8/2020	15,997,219	€ 6.01	-€ 0.07	-1.20%
4/9/2020	24,029,421	€ 6.13	€ 0.12	1.98%
4/14/2020	16,548,827	€ 6.23	€ 0.10	1.68%
4/15/2020	24,880,522	€ 5.72	-€ 0.51	-8.20%
4/16/2020	19,932,489	€ 5.73	€ 0.02	0.26%
4/17/2020	19,782,869	€ 6.00	€ 0.27	4.69%
4/20/2020	18,315,808	€ 5.83	-€ 0.18	-2.93%
4/21/2020	18,955,559	€ 5.61	-€ 0.22	-3.78%
4/22/2020	11,979,011	€ 5.65	€ 0.04	0.71%
4/23/2020	18,905,090	€ 5.75	€ 0.11	1.88%
4/24/2020	21,595,149	€ 5.50	-€ 0.25	-4.36%
4/27/2020	36,540,565	€ 6.12	€ 0.62	11.35%
4/28/2020	27,440,066	€ 6.34	€ 0.22	3.59%
4/29/2020	36,401,124	€ 7.05	€ 0.71	11.13%
4/30/2020	32,548,832	€ 6.76	-€ 0.29	-4.07%
5/4/2020	23,653,634	€ 6.47	-€ 0.30	-4.41%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
5/5/2020	16,263,829	€ 6.43	-€ 0.04	-0.62%
5/6/2020	13,102,385	€ 6.33	-€ 0.10	-1.56%
5/7/2020	13,383,951	€ 6.48	€ 0.15	2.43%
5/8/2020	9,869,611	€ 6.58	€ 0.10	1.61%
5/11/2020	14,473,558	€ 6.45	-€ 0.14	-2.08%
5/12/2020	12,352,088	€ 6.41	-€ 0.04	-0.64%
5/13/2020	18,604,412	€ 6.12	-€ 0.29	-4.45%
5/14/2020	21,597,249	€ 6.16	€ 0.04	0.64%
5/15/2020	18,762,343	€ 5.96	-€ 0.20	-3.18%
5/18/2020	19,393,369	€ 6.52	€ 0.56	9.34%
5/19/2020	22,659,728	€ 6.50	-€ 0.02	-0.37%
5/20/2020	15,159,555	€ 6.81	€ 0.32	4.85%
5/21/2020	9,971,475	€ 6.73	-€ 0.08	-1.23%
5/22/2020	15,736,859	€ 6.69	-€ 0.03	-0.49%
5/25/2020	9,784,493	€ 6.88	€ 0.18	2.75%
5/26/2020	27,892,377	€ 7.46	€ 0.58	8.46%
5/27/2020	29,089,100	€ 7.85	€ 0.39	5.28%
5/28/2020	19,635,090	€ 7.69	-€ 0.17	-2.13%
5/29/2020	22,102,399	€ 7.58	-€ 0.11	-1.39%
6/1/2020	2,526	€ 7.76	€ 0.18	2.37%
6/2/2020	25,988,359	€ 7.95	€ 0.19	2.49%
6/3/2020	21,319,104	€ 8.17	€ 0.22	2.77%
6/4/2020	22,509,110	€ 8.35	€ 0.18	2.17%
6/5/2020	25,858,880	€ 8.59	€ 0.24	2.81%
6/8/2020	26,675,059	€ 9.05	€ 0.46	5.39%
6/9/2020	25,578,248	€ 8.66	-€ 0.39	-4.29%
6/10/2020	21,925,877	€ 8.59	-€ 0.07	-0.83%
6/11/2020	21,658,744	€ 7.98	-€ 0.61	-7.08%
6/12/2020	20,025,966	€ 8.32	€ 0.34	4.27%
6/15/2020	17,501,578	€ 8.34	€ 0.02	0.25%
6/16/2020	19,298,830	€ 8.44	€ 0.10	1.20%
6/17/2020	16,702,011	€ 8.33	-€ 0.12	-1.36%
6/18/2020	22,058,171	€ 8.25	-€ 0.07	-0.89%
6/19/2020	27,330,526	€ 8.24	-€ 0.02	-0.19%
6/22/2020	12,109,083	€ 8.29	€ 0.06	0.69%
6/23/2020	15,762,915	€ 8.46	€ 0.17	2.05%
6/24/2020	12,560,058	€ 8.10	-€ 0.37	-4.31%
6/25/2020	14,247,814	€ 8.51	€ 0.41	5.03%
6/26/2020	11,885,671	€ 8.04	-€ 0.47	-5.53%
6/29/2020	13,338,312	€ 8.39	€ 0.35	4.38%
6/30/2020	11,866,242	€ 8.47	€ 0.08	1.00%
7/1/2020	10,385,114	€ 8.29	-€ 0.18	-2.10%
7/2/2020	16,506,954	€ 8.48	€ 0.18	2.22%
7/3/2020	7,547,167	€ 8.43	-€ 0.05	-0.63%
7/6/2020	17,602,524	€ 8.78	€ 0.36	4.26%
7/7/2020	12,810,760	€ 8.72	-€ 0.06	-0.68%
7/8/2020	11,161,989	€ 8.80	€ 0.08	0.89%
7/9/2020	11,830,815	€ 8.63	-€ 0.17	-1.99%
7/10/2020	11,913,306	€ 8.92	€ 0.29	3.35%
7/13/2020	16,404,140	€ 8.56	-€ 0.36	-3.99%
7/14/2020	14,026,778	€ 8.78	€ 0.22	2.55%
7/15/2020	13,568,917	€ 8.93	€ 0.15	1.74%
7/16/2020	10,626,215	€ 8.80	-€ 0.13	-1.48%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
7/17/2020	12,036,376	€ 8.73	-€ 0.07	-0.80%
7/20/2020	9,335,323	€ 8.88	€ 0.15	1.73%
7/21/2020	26,286,066	€ 8.44	-€ 0.44	-4.94%
7/22/2020	12,373,411	€ 8.51	€ 0.07	0.78%
7/23/2020	9,980,470	€ 8.28	-€ 0.23	-2.72%
7/24/2020	9,659,800	€ 8.25	-€ 0.03	-0.35%
7/27/2020	9,253,240	€ 8.10	-€ 0.15	-1.79%
7/28/2020	9,938,881	€ 8.06	-€ 0.04	-0.44%
7/29/2020	20,436,839	€ 7.81	-€ 0.25	-3.11%
7/30/2020	23,338,564	€ 7.61	-€ 0.21	-2.65%
7/31/2020	14,499,396	€ 7.58	-€ 0.03	-0.38%
8/3/2020	12,373,316	€ 7.82	€ 0.24	3.17%
8/4/2020	10,071,956	€ 7.82	€ 0.00	0.06%
8/5/2020	7,959,170	€ 7.88	€ 0.06	0.70%
8/6/2020	8,532,764	€ 7.76	-€ 0.12	-1.49%
8/7/2020	7,147,148	€ 7.81	€ 0.05	0.63%
8/10/2020	9,861,878	€ 8.00	€ 0.19	2.48%
8/11/2020	12,416,442	€ 8.12	€ 0.12	1.52%
8/12/2020	8,877,310	€ 8.23	€ 0.11	1.32%
8/13/2020	8,110,266	€ 8.10	-€ 0.13	-1.59%
8/14/2020	8,539,830	€ 8.02	-€ 0.08	-0.99%
8/17/2020	5,449,940	€ 7.98	-€ 0.04	-0.49%
8/18/2020	6,595,223	€ 7.87	-€ 0.11	-1.40%
8/19/2020	6,287,932	€ 8.07	€ 0.20	2.59%
8/20/2020	6,721,177	€ 7.88	-€ 0.20	-2.45%
8/21/2020	10,063,326	€ 7.77	-€ 0.10	-1.30%
8/24/2020	10,383,288	€ 8.12	€ 0.34	4.41%
8/25/2020	10,115,673	€ 8.16	€ 0.05	0.59%
8/26/2020	8,023,274	€ 8.30	€ 0.14	1.65%
8/27/2020	7,487,860	€ 8.24	-€ 0.06	-0.76%
8/28/2020	16,480,099	€ 8.30	€ 0.07	0.81%
8/31/2020	8,931,477	€ 7.99	-€ 0.32	-3.83%
9/1/2020	13,271,285	€ 7.97	-€ 0.02	-0.20%
9/2/2020	12,380,146	€ 7.95	-€ 0.02	-0.23%
9/3/2020	12,853,953	€ 7.82	-€ 0.13	-1.61%
9/4/2020	18,666,816	€ 8.22	€ 0.40	5.06%
9/7/2020	9,296,578	€ 8.12	-€ 0.10	-1.18%
9/8/2020	11,926,780	€ 7.98	-€ 0.14	-1.70%
9/9/2020	12,958,064	€ 7.99	€ 0.00	0.04%
9/10/2020	10,299,278	€ 7.91	-€ 0.08	-0.98%
9/11/2020	11,119,002	€ 7.83	-€ 0.08	-1.05%
9/14/2020	8,420,765	€ 7.86	€ 0.04	0.46%
9/15/2020	10,499,274	€ 7.69	-€ 0.17	-2.15%
9/16/2020	11,300,365	€ 7.86	€ 0.17	2.16%
9/17/2020	9,366,756	€ 7.78	-€ 0.08	-1.03%
9/18/2020	23,529,723	€ 7.67	-€ 0.11	-1.38%
9/21/2020	29,302,914	€ 7.09	-€ 0.59	-7.64%
9/22/2020	13,677,795	€ 6.96	-€ 0.13	-1.78%
9/23/2020	12,116,598	€ 6.90	-€ 0.06	-0.83%
9/24/2020	10,941,299	€ 6.93	€ 0.03	0.46%
9/25/2020	9,388,199	€ 6.85	-€ 0.08	-1.15%
9/28/2020	14,096,124	€ 7.24	€ 0.38	5.59%
9/29/2020	7,485,515	€ 7.04	-€ 0.20	-2.74%

Exhibit 3D**Deutsche Bank AG (GR)****Closing Price and Volume**

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
9/30/2020	9,742,800	€ 7.14	€ 0.11	1.49%
10/1/2020	8,953,930	€ 7.10	-€ 0.04	-0.59%
10/2/2020	10,160,508	€ 7.27	€ 0.17	2.44%
10/5/2020	10,781,565	€ 7.36	€ 0.08	1.14%
10/6/2020	16,417,097	€ 7.69	€ 0.34	4.55%
10/7/2020	10,425,848	€ 7.84	€ 0.14	1.86%
10/8/2020	10,811,110	€ 7.97	€ 0.14	1.74%
10/9/2020	7,920,562	€ 7.87	-€ 0.10	-1.22%
10/12/2020	7,837,968	€ 7.88	€ 0.00	0.03%
10/13/2020	8,758,848	€ 7.74	-€ 0.14	-1.78%
10/14/2020	7,938,873	€ 7.70	-€ 0.04	-0.52%
10/15/2020	10,859,428	€ 7.69	€ 0.00	-0.04%
10/16/2020	12,867,195	€ 7.85	€ 0.16	2.01%
10/19/2020	9,248,649	€ 7.88	€ 0.03	0.38%
10/20/2020	13,147,379	€ 8.11	€ 0.24	3.00%
10/21/2020	9,999,313	€ 7.94	-€ 0.17	-2.12%
10/22/2020	8,264,647	€ 7.98	€ 0.03	0.42%
10/23/2020	11,295,813	€ 8.12	€ 0.15	1.83%
10/26/2020	14,247,053	€ 8.09	-€ 0.03	-0.36%
10/27/2020	11,783,207	€ 7.81	-€ 0.29	-3.52%
10/28/2020	20,686,845	€ 7.83	€ 0.02	0.24%
10/29/2020	14,737,310	€ 7.87	€ 0.04	0.55%
10/30/2020	12,840,587	€ 7.98	€ 0.11	1.40%
11/2/2020	15,666,541	€ 8.26	€ 0.28	3.47%
11/3/2020	18,795,558	€ 8.54	€ 0.28	3.44%
11/4/2020	20,389,863	€ 8.47	-€ 0.07	-0.80%
11/5/2020	15,590,630	€ 8.49	€ 0.02	0.25%
11/6/2020	12,623,801	€ 8.56	€ 0.06	0.77%
11/9/2020	38,310,884	€ 8.97	€ 0.41	4.78%
11/10/2020	27,873,933	€ 9.08	€ 0.11	1.24%
11/11/2020	17,776,919	€ 8.90	-€ 0.18	-2.00%
11/12/2020	11,037,417	€ 8.81	-€ 0.09	-1.02%
11/13/2020	13,707,259	€ 9.04	€ 0.23	2.63%
11/16/2020	17,473,668	€ 9.10	€ 0.07	0.73%
11/17/2020	12,982,224	€ 9.10	€ 0.00	-0.03%
11/18/2020	12,763,163	€ 9.05	-€ 0.05	-0.52%
11/19/2020	11,539,886	€ 9.01	-€ 0.04	-0.43%
11/20/2020	8,378,335	€ 9.00	-€ 0.02	-0.20%
11/23/2020	14,568,391	€ 9.34	€ 0.34	3.80%
11/24/2020	16,727,160	€ 9.62	€ 0.28	2.98%
11/25/2020	12,830,335	€ 9.51	-€ 0.10	-1.06%
11/26/2020	5,981,958	€ 9.36	-€ 0.15	-1.58%
11/27/2020	9,144,962	€ 9.48	€ 0.11	1.20%
11/30/2020	13,114,501	€ 9.34	-€ 0.14	-1.44%
12/1/2020	10,387,187	€ 9.48	€ 0.14	1.47%
12/2/2020	10,752,550	€ 9.56	€ 0.09	0.91%
12/3/2020	13,736,026	€ 9.67	€ 0.11	1.12%
12/4/2020	13,788,650	€ 9.71	€ 0.04	0.39%
12/7/2020	9,210,610	€ 9.54	-€ 0.17	-1.72%
12/8/2020	8,583,917	€ 9.45	-€ 0.09	-0.94%
12/9/2020	10,956,964	€ 9.28	-€ 0.17	-1.82%
12/10/2020	12,504,516	€ 9.08	-€ 0.20	-2.18%
12/11/2020	14,660,913	€ 8.78	-€ 0.30	-3.31%

Deutsche Bank AG (GR)

Closing Price and Volume

Source: Bloomberg

Date	Volume	Closing Price	Price Change	Return
12/14/2020	9,444,271	€ 8.74	-€ 0.04	-0.46%
12/15/2020	9,281,018	€ 8.91	€ 0.18	2.01%
12/16/2020	10,151,906	€ 8.96	€ 0.05	0.52%
12/17/2020	10,560,505	€ 9.09	€ 0.13	1.48%

Exhibit 4A**Deutsche Bank AG (US)****Volume Analysis**

Source: Bloomberg

Date	Weekly Volume	Dollar Volume of Trades	Volume as % of Shares Outstanding
3/24/2017	67,051,934	\$1,126,617,468	4.86%
3/31/2017	47,338,225	\$816,194,057	3.43%
4/7/2017	34,384,212	\$570,775,980	1.66%
4/13/2017	22,735,560	\$367,830,810	1.10%
4/21/2017	29,754,939	\$483,343,506	1.44%
4/28/2017	49,216,252	\$904,516,621	2.38%
5/5/2017	24,019,400	\$448,370,406	1.16%
5/12/2017	17,906,583	\$338,671,998	0.87%
5/19/2017	30,690,993	\$580,648,886	1.48%
5/26/2017	20,677,427	\$391,361,906	1.00%
6/2/2017	23,315,440	\$411,609,977	1.13%
6/9/2017	16,842,466	\$295,147,992	0.81%
6/16/2017	22,375,031	\$382,986,355	1.08%
6/23/2017	12,807,146	\$216,133,324	0.62%
6/30/2017	25,439,033	\$451,035,115	1.23%
7/7/2017	17,687,864	\$331,397,742	0.86%
7/14/2017	14,239,082	\$269,339,944	0.69%
7/21/2017	12,615,185	\$232,807,254	0.61%
7/28/2017	26,306,756	\$486,717,658	1.27%
8/4/2017	16,038,651	\$289,279,874	0.78%
8/11/2017	23,985,970	\$415,338,990	1.16%
8/18/2017	23,684,509	\$398,699,746	1.15%
8/25/2017	19,579,774	\$318,605,109	0.95%
9/1/2017	14,727,482	\$236,710,381	0.71%
9/8/2017	15,814,991	\$250,986,894	0.77%
9/15/2017	16,449,763	\$274,587,634	0.80%
9/22/2017	15,933,087	\$263,649,746	0.77%
9/29/2017	33,572,121	\$555,264,159	1.62%
10/6/2017	15,687,471	\$268,025,132	0.76%
10/13/2017	15,652,062	\$262,785,588	0.76%
10/20/2017	14,740,813	\$248,035,949	0.71%
10/27/2017	27,914,630	\$469,374,574	1.35%
11/3/2017	21,245,403	\$354,036,806	1.03%
11/10/2017	26,443,925	\$456,236,841	1.28%
11/17/2017	26,630,094	\$494,095,692	1.29%
11/24/2017	11,058,195	\$210,792,443	0.54%
12/1/2017	19,329,284	\$365,267,480	0.94%
12/8/2017	17,521,677	\$333,075,416	0.85%
12/15/2017	13,442,237	\$259,982,049	0.65%
12/22/2017	19,040,036	\$377,267,976	0.92%
12/29/2017	7,301,215	\$139,458,060	0.35%
1/5/2018	27,469,247	\$519,317,250	1.33%
1/12/2018	21,820,756	\$402,024,197	1.06%
1/19/2018	10,638,387	\$197,786,636	0.51%
1/26/2018	19,826,285	\$387,234,474	0.96%
2/2/2018	30,149,531	\$537,776,202	1.46%
2/9/2018	50,372,461	\$808,843,749	2.44%
2/16/2018	21,185,719	\$340,596,669	1.03%
2/23/2018	15,378,771	\$253,406,382	0.74%
3/2/2018	22,175,984	\$353,838,135	1.07%
3/9/2018	17,174,663	\$276,846,561	0.83%
3/16/2018	17,304,216	\$273,683,502	0.84%
3/23/2018	40,385,516	\$585,202,130	1.95%
3/29/2018	22,079,393	\$306,740,784	1.07%

Share Turnover	
Calendar Days	1,284
Time Period (years)	3.515
Shares Out at End of Class Period	2,066,773,000
Total Volume in Class Period	4,782,994,387
Annualized Share Turnover	65.8%

Shares Outstanding	
1/4/2016	1,544,854,000
3/21/2017	1,379,273,000
4/5/2017	2,066,773,000

Exhibit 4A**Deutsche Bank AG (US)****Volume Analysis**

Source: Bloomberg

Date	Weekly Volume	Dollar Volume of Trades	Volume as % of Shares Outstanding
4/6/2018	19,246,345	\$267,971,423	0.93%
4/13/2018	16,909,201	\$239,798,006	0.82%
4/20/2018	14,136,355	\$203,239,049	0.68%
4/27/2018	21,954,839	\$315,588,693	1.06%
5/4/2018	11,763,943	\$160,588,281	0.57%
5/11/2018	12,449,560	\$171,227,780	0.60%
5/18/2018	23,226,609	\$304,208,564	1.12%
5/25/2018	30,669,260	\$382,637,503	1.48%
6/1/2018	68,676,675	\$768,962,016	3.32%
6/8/2018	37,764,023	\$427,148,988	1.83%
6/15/2018	20,075,783	\$226,661,306	0.97%
6/22/2018	22,309,707	\$246,504,687	1.08%
6/29/2018	28,991,811	\$306,395,765	1.40%
7/6/2018	20,661,961	\$228,537,494	1.00%
7/13/2018	21,249,997	\$240,402,454	1.03%
7/20/2018	40,289,702	\$485,747,241	1.95%
7/27/2018	31,866,365	\$390,462,709	1.54%
8/3/2018	28,526,673	\$365,075,193	1.38%
8/10/2018	23,691,750	\$288,518,665	1.15%
8/17/2018	28,965,008	\$328,265,107	1.40%
8/24/2018	17,371,871	\$198,391,904	0.84%
8/31/2018	17,389,122	\$200,516,130	0.84%
9/7/2018	14,015,204	\$159,000,746	0.68%
9/14/2018	27,472,972	\$309,301,183	1.33%
9/21/2018	22,122,947	\$266,965,980	1.07%
9/28/2018	17,384,054	\$206,009,535	0.84%
10/5/2018	22,306,710	\$250,045,588	1.08%
10/12/2018	21,918,248	\$239,100,865	1.06%
10/19/2018	25,195,847	\$278,244,904	1.22%
10/26/2018	37,453,047	\$379,470,469	1.81%
11/2/2018	29,684,953	\$297,919,043	1.44%
11/9/2018	15,621,448	\$162,334,142	0.76%
11/16/2018	21,179,306	\$208,014,166	1.02%
11/23/2018	19,400,146	\$181,996,771	0.94%
11/30/2018	35,273,336	\$337,000,884	1.71%
12/7/2018	29,334,240	\$263,906,605	1.42%
12/14/2018	47,112,328	\$411,976,483	2.28%
12/21/2018	37,616,979	\$309,975,459	1.82%
12/28/2018	33,424,303	\$265,575,328	1.62%
1/4/2019	23,157,063	\$190,546,426	1.12%
1/11/2019	20,641,573	\$178,421,198	1.00%
1/18/2019	36,373,392	\$328,679,598	1.76%
1/25/2019	14,838,784	\$133,904,929	0.72%
2/1/2019	31,580,694	\$283,731,782	1.53%
2/8/2019	26,333,571	\$224,292,245	1.27%
2/15/2019	20,366,399	\$173,740,010	0.99%
2/22/2019	13,536,364	\$117,246,207	0.65%
3/1/2019	21,764,476	\$197,431,405	1.05%
3/8/2019	21,714,524	\$193,743,677	1.05%
3/15/2019	25,307,186	\$227,502,388	1.22%
3/22/2019	35,129,513	\$307,664,935	1.70%
3/29/2019	39,598,404	\$326,022,874	1.92%
4/5/2019	27,216,022	\$231,658,152	1.32%
4/12/2019	24,578,441	\$205,637,082	1.19%

Exhibit 4A**Deutsche Bank AG (US)****Volume Analysis**

Source: Bloomberg

Date	Weekly Volume	Dollar Volume of Trades	Volume as % of Shares Outstanding
4/18/2019	20,555,096	\$181,229,958	0.99%
4/26/2019	28,770,815	\$242,858,608	1.39%
5/3/2019	15,587,802	\$128,498,710	0.75%
5/10/2019	23,947,611	\$188,705,394	1.16%
5/17/2019	22,569,796	\$172,648,283	1.09%
5/24/2019	22,533,332	\$165,253,425	1.09%
5/31/2019	22,731,952	\$156,905,501	1.10%
6/7/2019	27,526,637	\$188,938,818	1.33%
6/14/2019	22,692,600	\$156,893,995	1.10%
6/21/2019	25,941,770	\$183,815,897	1.26%
6/28/2019	28,034,047	\$207,795,807	1.36%
7/5/2019	21,305,844	\$166,932,774	1.03%
7/12/2019	48,475,394	\$362,431,817	2.35%
7/19/2019	29,598,969	\$232,842,296	1.43%
7/26/2019	28,599,387	\$226,220,972	1.38%
8/2/2019	28,940,152	\$224,461,679	1.40%
8/9/2019	30,287,345	\$229,787,992	1.47%
8/16/2019	62,822,358	\$430,869,642	3.04%
8/23/2019	36,573,977	\$256,964,949	1.77%
8/30/2019	19,715,598	\$141,065,684	0.95%
9/6/2019	22,117,430	\$168,529,025	1.07%
9/13/2019	38,710,566	\$321,318,838	1.87%
9/20/2019	27,197,807	\$221,327,898	1.32%
9/27/2019	27,031,331	\$206,067,722	1.31%
10/4/2019	24,005,927	\$173,836,947	1.16%
10/11/2019	27,498,380	\$195,797,313	1.33%
10/18/2019	24,862,697	\$194,322,184	1.20%
10/25/2019	28,239,358	\$224,750,150	1.37%
11/1/2019	37,902,936	\$284,802,415	1.83%
11/8/2019	26,495,912	\$202,990,980	1.28%
11/15/2019	19,795,205	\$146,017,198	0.96%
11/22/2019	19,089,469	\$140,194,931	0.92%
11/29/2019	12,443,075	\$91,009,192	0.60%
12/6/2019	17,827,502	\$127,499,006	0.86%
12/13/2019	28,621,452	\$212,462,805	1.38%
12/20/2019	17,577,170	\$136,695,776	0.85%
12/27/2019	8,980,216	\$68,859,272	0.43%
1/3/2020	22,255,197	\$181,217,236	1.08%
1/10/2020	27,127,903	\$228,205,133	1.31%
1/17/2020	23,241,507	\$197,207,884	1.12%
1/24/2020	21,847,665	\$185,453,123	1.06%
1/31/2020	35,061,966	\$315,301,196	1.70%
2/7/2020	45,506,844	\$450,305,897	2.20%
2/14/2020	35,942,557	\$385,298,417	1.74%
2/21/2020	31,432,707	\$330,861,654	1.52%
2/28/2020	57,254,493	\$528,444,901	2.77%
3/6/2020	60,866,612	\$491,215,844	2.95%
3/13/2020	70,293,439	\$442,316,565	3.40%
3/20/2020	66,438,583	\$377,744,286	3.21%
3/27/2020	45,771,641	\$298,767,738	2.21%
4/3/2020	27,901,625	\$172,028,575	1.35%
4/9/2020	25,457,801	\$167,450,554	1.23%
4/17/2020	24,006,354	\$155,751,066	1.16%
4/24/2020	28,290,685	\$173,042,396	1.37%

Exhibit 4A**Deutsche Bank AG (US)****Volume Analysis**

Source: Bloomberg

Date	Weekly Volume	Dollar Volume of Trades	Volume as % of Shares Outstanding
5/1/2020	41,483,093	\$298,429,931	2.01%
5/8/2020	25,237,688	\$176,137,707	1.22%
5/15/2020	26,260,809	\$175,843,493	1.27%
5/22/2020	28,509,889	\$206,453,614	1.38%
5/29/2020	32,966,094	\$278,516,060	1.60%
6/5/2020	35,196,704	\$326,806,950	1.70%
6/12/2020	42,166,544	\$406,819,820	2.04%
6/19/2020	23,421,560	\$219,320,963	1.13%
6/26/2020	25,469,543	\$236,901,821	1.23%
7/2/2020	17,199,627	\$162,608,866	0.83%
7/10/2020	20,975,646	\$208,114,749	1.01%
7/17/2020	22,556,249	\$225,140,707	1.09%
7/24/2020	16,532,554	\$161,761,811	0.80%
7/31/2020	27,437,949	\$251,692,909	1.33%
8/7/2020	13,015,924	\$120,532,309	0.63%
8/14/2020	13,341,892	\$127,624,824	0.65%
8/21/2020	10,700,649	\$100,281,249	0.52%
8/28/2020	16,770,518	\$163,407,348	0.81%
9/4/2020	18,287,453	\$174,121,565	0.88%
9/11/2020	17,571,455	\$164,729,984	0.85%
9/18/2020	12,549,324	\$115,558,224	0.61%
Average	25,988,812	\$289,220,172	1.3%
Minimum	7,301,215	\$68,859,272	0.4%
Maximum	70,293,439	\$1,126,617,468	4.9%
Total	4,755,952,539	\$52,927,291,446	

Exhibit 4B**Deutsche Bank AG (GR)****Volume Analysis**

Source: Bloomberg

Date	Weekly Volume	Dollar Volume of Trades	Volume as % of Shares Outstanding
3/24/2017	145,898,070	€ 2,272,297,425	10.58%
3/31/2017	88,226,897	€ 1,414,156,560	6.40%
4/7/2017	113,094,772	€ 1,761,653,581	5.47%
4/13/2017	55,345,916	€ 844,398,839	2.68%
4/21/2017	63,021,237	€ 957,078,580	3.05%
4/28/2017	118,031,545	€ 1,994,492,461	5.71%
5/5/2017	50,607,366	€ 866,952,348	2.45%
5/12/2017	71,607,397	€ 1,243,360,596	3.46%
5/19/2017	78,658,355	€ 1,338,269,900	3.81%
5/26/2017	49,633,294	€ 836,061,346	2.40%
6/2/2017	69,963,891	€ 1,104,436,714	3.39%
6/9/2017	47,783,023	€ 742,838,782	2.31%
6/16/2017	88,897,028	€ 1,350,593,042	4.30%
6/23/2017	58,177,142	€ 880,667,107	2.81%
6/30/2017	74,490,095	€ 1,160,123,386	3.60%
7/7/2017	69,865,103	€ 1,148,051,829	3.38%
7/14/2017	58,176,793	€ 962,304,390	2.81%
7/21/2017	57,765,553	€ 917,078,209	2.79%
7/28/2017	87,489,883	€ 1,380,872,201	4.23%
8/4/2017	63,006,841	€ 962,676,402	3.05%
8/11/2017	75,678,470	€ 1,114,880,517	3.66%
8/18/2017	64,122,088	€ 917,062,096	3.10%
8/25/2017	55,776,050	€ 768,935,253	2.70%
9/1/2017	53,622,646	€ 722,891,655	2.59%
9/8/2017	54,248,447	€ 722,210,951	2.62%
9/15/2017	90,666,367	€ 1,264,702,749	4.39%
9/22/2017	59,226,247	€ 821,053,109	2.87%
9/29/2017	70,638,432	€ 999,570,295	3.42%
10/6/2017	48,147,120	€ 699,955,733	2.33%
10/13/2017	52,237,390	€ 742,923,601	2.53%
10/20/2017	44,874,630	€ 640,743,978	2.17%
10/27/2017	91,510,122	€ 1,314,614,825	4.43%
11/3/2017	75,927,716	€ 1,088,517,146	3.67%
11/10/2017	98,937,981	€ 1,469,938,630	4.79%
11/17/2017	106,481,480	€ 1,680,132,420	5.15%
11/24/2017	62,307,106	€ 1,004,370,922	3.01%
12/1/2017	65,152,292	€ 1,034,790,990	3.15%
12/8/2017	68,946,665	€ 1,109,617,752	3.34%
12/15/2017	69,791,362	€ 1,147,174,867	3.38%
12/22/2017	64,562,850	€ 1,080,660,115	3.12%
12/29/2017	20,108,596	€ 320,934,850	0.97%
1/5/2018	80,603,076	€ 1,273,564,609	3.90%
1/12/2018	100,016,380	€ 1,533,768,660	4.84%
1/19/2018	57,108,381	€ 867,938,119	2.76%
1/26/2018	78,175,008	€ 1,235,715,415	3.78%
2/2/2018	115,760,595	€ 1,673,012,945	5.60%
2/9/2018	157,489,332	€ 2,050,572,894	7.62%
2/16/2018	101,337,547	€ 1,314,761,587	4.90%
2/23/2018	61,524,764	€ 822,060,147	2.98%
3/2/2018	63,426,419	€ 824,448,204	3.07%
3/9/2018	63,368,422	€ 824,338,681	3.07%
3/16/2018	68,194,915	€ 874,061,177	3.30%
3/23/2018	118,719,520	€ 1,396,041,746	5.74%
3/29/2018	68,798,354	€ 773,286,964	3.33%

Share Turnover	
Calendar Days	1,284
Time Period (years)	3.515
Shares Out at End of Class Period	2,066,773,000
Total Volume in Class Period	14,608,794,134
Annualized Share Turnover	201.1%

Shares Outstanding	
1/4/2016	1,545,390,000
3/21/2017	1,379,273,000
4/5/2017	2,066,773,000

Exhibit 4B**Deutsche Bank AG (GR)****Volume Analysis**

Source: Bloomberg

Date	Weekly Volume	Dollar Volume of Trades	Volume as % of Shares Outstanding
4/6/2018	67,393,913	€ 765,907,149	3.26%
4/13/2018	68,137,142	€ 782,954,233	3.30%
4/20/2018	50,226,016	€ 583,416,973	2.43%
4/27/2018	99,317,179	€ 1,170,559,468	4.81%
5/4/2018	46,958,907	€ 534,793,130	2.27%
5/11/2018	42,421,354	€ 489,574,650	2.05%
5/18/2018	81,438,729	€ 900,014,122	3.94%
5/25/2018	98,602,916	€ 1,051,433,106	4.77%
6/1/2018	193,015,486	€ 1,870,801,829	9.34%
6/8/2018	113,578,595	€ 1,087,381,698	5.50%
6/15/2018	102,420,542	€ 984,324,844	4.96%
6/22/2018	79,112,078	€ 752,030,594	3.83%
6/29/2018	101,760,155	€ 926,286,711	4.92%
7/6/2018	99,878,290	€ 949,505,419	4.83%
7/13/2018	72,965,497	€ 704,134,169	3.53%
7/20/2018	110,919,786	€ 1,143,081,844	5.37%
7/27/2018	67,996,730	€ 711,353,563	3.29%
8/3/2018	76,889,628	€ 844,550,536	3.72%
8/10/2018	66,723,345	€ 707,936,118	3.23%
8/17/2018	78,083,834	€ 775,196,589	3.78%
8/24/2018	47,916,062	€ 473,261,762	2.32%
8/31/2018	52,521,514	€ 517,007,504	2.54%
9/7/2018	69,665,575	€ 679,757,310	3.37%
9/14/2018	70,998,400	€ 687,868,780	3.44%
9/21/2018	169,552,271	€ 1,760,462,469	8.20%
9/28/2018	66,846,135	€ 674,883,124	3.23%
10/5/2018	55,085,027	€ 533,515,213	2.67%
10/12/2018	65,670,800	€ 621,582,219	3.18%
10/19/2018	63,753,989	€ 612,268,295	3.08%
10/26/2018	95,602,190	€ 847,319,059	4.63%
11/2/2018	76,606,290	€ 678,474,076	3.71%
11/9/2018	53,001,590	€ 482,390,293	2.56%
11/16/2018	57,290,109	€ 497,609,108	2.77%
11/23/2018	63,320,281	€ 521,053,189	3.06%
11/30/2018	74,705,469	€ 627,393,629	3.61%
12/7/2018	79,555,166	€ 633,089,425	3.85%
12/14/2018	94,382,956	€ 722,545,393	4.57%
12/21/2018	105,110,049	€ 752,629,351	5.09%
12/28/2018	28,306,844	€ 193,851,796	1.37%
1/4/2019	46,590,353	€ 338,147,737	2.25%
1/11/2019	69,513,759	€ 522,649,386	3.36%
1/18/2019	93,918,911	€ 736,725,747	4.54%
1/25/2019	66,476,404	€ 526,255,947	3.22%
2/1/2019	80,335,420	€ 633,311,583	3.89%
2/8/2019	73,125,625	€ 551,040,634	3.54%
2/15/2019	63,186,505	€ 477,183,399	3.06%
2/22/2019	47,148,579	€ 360,273,199	2.28%
3/1/2019	65,070,606	€ 520,650,810	3.15%
3/8/2019	65,476,288	€ 516,809,932	3.17%
3/15/2019	77,236,578	€ 610,904,546	3.74%
3/22/2019	92,303,274	€ 711,960,526	4.47%
3/29/2019	74,454,494	€ 545,478,332	3.60%
4/5/2019	70,125,817	€ 530,984,722	3.39%
4/12/2019	70,695,920	€ 525,229,623	3.42%

Exhibit 4B**Deutsche Bank AG (GR)****Volume Analysis**

Source: Bloomberg

Date	Weekly Volume	Dollar Volume of Trades	Volume as % of Shares Outstanding
4/18/2019	48,861,874	€ 380,806,387	2.36%
4/26/2019	79,738,776	€ 597,137,448	3.86%
5/3/2019	51,338,926	€ 378,940,481	2.48%
5/10/2019	77,795,997	€ 546,664,180	3.76%
5/17/2019	65,394,083	€ 446,775,529	3.16%
5/24/2019	83,664,643	€ 550,258,476	4.05%
5/31/2019	72,932,147	€ 453,683,043	3.53%
6/7/2019	88,102,389	€ 534,084,817	4.26%
6/14/2019	49,494,943	€ 302,436,741	2.39%
6/21/2019	106,019,043	€ 667,711,707	5.13%
6/28/2019	70,818,224	€ 460,630,113	3.43%
7/5/2019	76,815,645	€ 533,578,690	3.72%
7/12/2019	120,353,065	€ 800,964,798	5.82%
7/19/2019	74,218,941	€ 519,189,871	3.59%
7/26/2019	92,889,638	€ 659,138,020	4.49%
8/2/2019	83,263,399	€ 582,695,329	4.03%
8/9/2019	93,536,494	€ 633,228,413	4.53%
8/16/2019	129,400,756	€ 795,305,421	6.26%
8/23/2019	67,841,832	€ 429,519,298	3.28%
8/30/2019	53,562,310	€ 346,904,187	2.59%
9/6/2019	62,435,511	€ 431,064,971	3.02%
9/13/2019	113,182,011	€ 847,826,590	5.48%
9/20/2019	73,413,080	€ 539,031,726	3.55%
9/27/2019	71,660,388	€ 495,556,150	3.47%
10/4/2019	55,742,605	€ 369,441,706	2.70%
10/11/2019	67,781,565	€ 440,500,115	3.28%
10/18/2019	77,955,440	€ 549,425,787	3.77%
10/25/2019	61,102,843	€ 438,120,263	2.96%
11/1/2019	92,145,549	€ 620,187,286	4.46%
11/8/2019	80,363,785	€ 556,587,776	3.89%
11/15/2019	65,779,935	€ 440,995,077	3.18%
11/22/2019	53,066,924	€ 351,519,793	2.57%
11/29/2019	43,548,779	€ 288,915,096	2.11%
12/6/2019	62,003,406	€ 400,228,768	3.00%
12/13/2019	79,341,956	€ 527,142,413	3.84%
12/20/2019	82,206,394	€ 574,935,263	3.98%
12/27/2019	18,478,632	€ 127,457,541	0.89%
1/3/2020	43,635,572	€ 318,832,406	2.11%
1/10/2020	86,774,215	€ 655,313,784	4.20%
1/17/2020	67,832,158	€ 517,107,761	3.28%
1/24/2020	74,880,698	€ 570,963,745	3.62%
1/31/2020	108,971,628	€ 882,685,186	5.27%
2/7/2020	127,289,663	€ 1,143,097,156	6.16%
2/14/2020	101,234,912	€ 1,000,346,461	4.90%
2/21/2020	89,426,651	€ 876,261,003	4.33%
2/28/2020	167,022,912	€ 1,399,345,338	8.08%
3/6/2020	165,275,009	€ 1,190,857,740	8.00%
3/13/2020	296,069,563	€ 1,651,517,768	14.33%
3/20/2020	191,177,665	€ 984,089,992	9.25%
3/27/2020	138,657,295	€ 833,184,830	6.71%
4/3/2020	117,826,379	€ 662,686,728	5.70%
4/9/2020	87,368,928	€ 527,108,380	4.23%
4/17/2020	81,144,707	€ 478,278,063	3.93%
4/24/2020	89,750,617	€ 508,053,499	4.34%

Exhibit 4B**Deutsche Bank AG (GR)****Volume Analysis**

Source: Bloomberg

Date	Weekly Volume	Dollar Volume of Trades	Volume as % of Shares Outstanding
4/30/2020	132,930,587	€ 874,609,874	6.43%
5/8/2020	76,273,410	€ 491,974,698	3.69%
5/15/2020	85,789,650	€ 531,167,988	4.15%
5/22/2020	82,920,986	€ 549,314,735	4.01%
5/29/2020	108,503,459	€ 822,311,788	5.25%
6/5/2020	95,677,979	€ 790,895,611	4.63%
6/12/2020	115,863,894	€ 990,635,833	5.61%
6/19/2020	102,891,116	€ 855,164,160	4.98%
6/26/2020	66,565,541	€ 552,279,115	3.22%
7/3/2020	59,643,789	€ 502,077,537	2.89%
7/10/2020	65,319,394	€ 572,912,946	3.16%
7/17/2020	66,662,426	€ 583,296,085	3.23%
7/24/2020	67,635,070	€ 572,301,699	3.27%
7/31/2020	77,466,920	€ 602,068,978	3.75%
8/7/2020	46,084,354	€ 360,179,676	2.23%
8/14/2020	47,805,726	€ 387,037,652	2.31%
8/21/2020	35,117,598	€ 277,307,758	1.70%
8/28/2020	52,490,194	€ 431,944,548	2.54%
9/4/2020	66,103,677	€ 529,490,290	3.20%
9/11/2020	55,599,702	€ 442,700,575	2.69%
9/18/2020	63,116,883	€ 489,135,671	3.05%
Average	79,517,318	€ 784,997,533	3.9%
Minimum	18,478,632	€ 127,457,541	0.9%
Maximum	296,069,563	€ 2,272,297,425	14.3%
Total	14,551,669,198	€ 143,654,548,485	

Exhibit 4C**Deutsche Bank AG (US, GR)****Volume Analysis**

Source: Bloomberg

Date	Weekly Volume	Volume as % of Shares Outstanding
3/24/2017	212,950,004	15.44%
3/31/2017	135,565,122	9.83%
4/7/2017	147,478,984	7.14%
4/13/2017	78,081,476	3.78%
4/21/2017	92,776,176	4.49%
4/28/2017	167,247,797	8.09%
5/5/2017	74,626,766	3.61%
5/12/2017	89,513,980	4.33%
5/19/2017	109,349,348	5.29%
5/26/2017	70,310,721	3.40%
6/2/2017	93,279,331	4.51%
6/9/2017	64,625,489	3.13%
6/16/2017	111,272,059	5.38%
6/23/2017	70,984,288	3.43%
6/30/2017	99,929,128	4.84%
7/7/2017	87,552,967	4.24%
7/14/2017	72,415,875	3.50%
7/21/2017	70,380,738	3.41%
7/28/2017	113,796,639	5.51%
8/4/2017	79,045,492	3.82%
8/11/2017	99,664,440	4.82%
8/18/2017	87,806,597	4.25%
8/25/2017	75,355,824	3.65%
9/1/2017	68,350,128	3.31%
9/8/2017	70,063,438	3.39%
9/15/2017	107,116,130	5.18%
9/22/2017	75,159,334	3.64%
9/29/2017	104,210,553	5.04%
10/6/2017	63,834,591	3.09%
10/13/2017	67,889,452	3.28%
10/20/2017	59,615,443	2.88%
10/27/2017	119,424,752	5.78%
11/3/2017	97,173,119	4.70%
11/10/2017	125,381,906	6.07%
11/17/2017	133,111,574	6.44%
11/24/2017	73,365,301	3.55%
12/1/2017	84,481,576	4.09%
12/8/2017	86,468,342	4.18%
12/15/2017	83,233,599	4.03%
12/22/2017	83,602,886	4.05%
12/29/2017	27,409,811	1.33%
1/5/2018	108,072,323	5.23%
1/12/2018	121,837,136	5.90%
1/19/2018	67,746,768	3.28%
1/26/2018	98,001,293	4.74%
2/2/2018	145,910,126	7.06%
2/9/2018	207,861,793	10.06%
2/16/2018	122,523,266	5.93%
2/23/2018	76,903,535	3.72%
3/2/2018	85,602,403	4.14%
3/9/2018	80,543,085	3.90%
3/16/2018	85,499,131	4.14%
3/23/2018	159,105,036	7.70%
3/29/2018	90,877,747	4.40%
4/6/2018	86,640,258	4.19%
4/13/2018	85,046,343	4.11%

Share Turnover	
Calendar Days	1,284
Time Period (years)	3.515
Shares Out at End of Class Period	2,066,773,000
Total Volume in Class Period	19,391,788,521
Annualized Share Turnover	266.9%

Shares Outstanding	
1/4/2016	1,544,854,000
3/21/2017	1,379,273,000
4/5/2017	2,066,773,000

Exhibit 4C**Deutsche Bank AG (US, GR)****Volume Analysis**

Source: Bloomberg

Date	Weekly Volume	Volume as % of Shares Outstanding
4/20/2018	64,362,371	3.11%
4/27/2018	121,272,018	5.87%
5/4/2018	58,722,850	2.84%
5/11/2018	54,870,914	2.65%
5/18/2018	104,665,338	5.06%
5/25/2018	129,272,176	6.25%
6/1/2018	261,692,161	12.66%
6/8/2018	151,342,618	7.32%
6/15/2018	122,496,325	5.93%
6/22/2018	101,421,785	4.91%
6/29/2018	130,751,966	6.33%
7/6/2018	120,540,251	5.83%
7/13/2018	94,215,494	4.56%
7/20/2018	151,209,488	7.32%
7/27/2018	99,863,095	4.83%
8/3/2018	105,416,301	5.10%
8/10/2018	90,415,095	4.37%
8/17/2018	107,048,842	5.18%
8/24/2018	65,287,933	3.16%
8/31/2018	69,910,636	3.38%
9/7/2018	83,680,779	4.05%
9/14/2018	98,471,372	4.76%
9/21/2018	191,675,218	9.27%
9/28/2018	84,230,189	4.08%
10/5/2018	77,391,737	3.74%
10/12/2018	87,589,048	4.24%
10/19/2018	88,949,836	4.30%
10/26/2018	133,055,237	6.44%
11/2/2018	106,291,243	5.14%
11/9/2018	68,623,038	3.32%
11/16/2018	78,469,415	3.80%
11/23/2018	82,720,427	4.00%
11/30/2018	109,978,805	5.32%
12/7/2018	108,889,406	5.27%
12/14/2018	141,495,284	6.85%
12/21/2018	142,727,028	6.91%
12/28/2018	61,731,147	2.99%
1/4/2019	69,747,416	3.37%
1/11/2019	90,155,332	4.36%
1/18/2019	130,292,303	6.30%
1/25/2019	81,315,188	3.93%
2/1/2019	111,916,114	5.42%
2/8/2019	99,459,196	4.81%
2/15/2019	83,552,904	4.04%
2/22/2019	60,684,943	2.94%
3/1/2019	86,835,082	4.20%
3/8/2019	87,190,812	4.22%
3/15/2019	102,543,764	4.96%
3/22/2019	127,432,787	6.17%
3/29/2019	114,052,898	5.52%
4/5/2019	97,341,839	4.71%
4/12/2019	95,274,361	4.61%
4/18/2019	69,416,970	3.36%
4/26/2019	108,509,591	5.25%
5/3/2019	66,926,728	3.24%
5/10/2019	101,743,608	4.92%

Exhibit 4C**Deutsche Bank AG (US, GR)****Volume Analysis**

Source: Bloomberg

Date	Weekly Volume	Volume as % of Shares Outstanding
5/17/2019	87,963,879	4.26%
5/24/2019	106,197,975	5.14%
5/31/2019	95,664,099	4.63%
6/7/2019	115,629,026	5.59%
6/14/2019	72,187,543	3.49%
6/21/2019	131,960,813	6.38%
6/28/2019	98,852,271	4.78%
7/5/2019	98,121,489	4.75%
7/12/2019	168,828,459	8.17%
7/19/2019	103,817,910	5.02%
7/26/2019	121,489,025	5.88%
8/2/2019	112,203,551	5.43%
8/9/2019	123,823,839	5.99%
8/16/2019	192,223,114	9.30%
8/23/2019	104,415,809	5.05%
8/30/2019	73,277,908	3.55%
9/6/2019	84,552,941	4.09%
9/13/2019	151,892,577	7.35%
9/20/2019	100,610,887	4.87%
9/27/2019	98,691,719	4.78%
10/4/2019	79,748,532	3.86%
10/11/2019	95,279,945	4.61%
10/18/2019	102,818,137	4.97%
10/25/2019	89,342,201	4.32%
11/1/2019	130,048,485	6.29%
11/8/2019	106,859,697	5.17%
11/15/2019	85,575,140	4.14%
11/22/2019	72,156,393	3.49%
11/29/2019	55,991,854	2.71%
12/6/2019	79,830,908	3.86%
12/13/2019	107,963,408	5.22%
12/20/2019	99,783,564	4.83%
12/27/2019	27,458,848	1.33%
1/3/2020	65,890,769	3.19%
1/10/2020	113,902,118	5.51%
1/17/2020	91,073,665	4.41%
1/24/2020	96,728,363	4.68%
1/31/2020	144,033,594	6.97%
2/7/2020	172,796,507	8.36%
2/14/2020	137,177,469	6.64%
2/21/2020	120,859,358	5.85%
2/28/2020	224,277,405	10.85%
3/6/2020	226,141,621	10.94%
3/13/2020	366,363,002	17.73%
3/20/2020	257,616,248	12.46%
3/27/2020	184,428,936	8.92%
4/3/2020	145,728,004	7.05%
4/9/2020	112,826,729	5.46%
4/17/2020	105,151,061	5.09%
4/24/2020	118,041,302	5.71%
5/1/2020	174,413,680	8.44%
5/8/2020	101,511,098	4.91%
5/15/2020	112,050,459	5.42%
5/22/2020	111,430,875	5.39%
5/29/2020	141,469,553	6.84%
6/5/2020	130,874,683	6.33%

Exhibit 4C**Deutsche Bank AG (US, GR)****Volume Analysis**

Source: Bloomberg

Date	Weekly Volume	Volume as % of Shares Outstanding
6/12/2020	158,030,438	7.65%
6/19/2020	126,312,676	6.11%
6/26/2020	92,035,084	4.45%
7/2/2020	76,843,416	3.72%
7/10/2020	86,295,040	4.18%
7/17/2020	89,218,675	4.32%
7/24/2020	84,167,624	4.07%
7/31/2020	104,904,869	5.08%
8/7/2020	59,100,278	2.86%
8/14/2020	61,147,618	2.96%
8/21/2020	45,818,247	2.22%
8/28/2020	69,260,712	3.35%
9/4/2020	84,391,130	4.08%
9/11/2020	73,171,157	3.54%
9/18/2020	75,666,207	3.66%
Average	105,506,130	5.2%
Minimum	27,409,811	1.3%
Maximum	366,363,002	17.7%
Total	19,307,621,737	

Exhibit 5A**Deutsche Bank AG****Number of Analyst Reports by Company**

Source: Refinitiv Eikon, Bloomberg

Abridged Search with Company Name as Primary Ticker Only

Number	Analyst Name	Reports
1	Morningstar, Inc.	112
2	BofA Global Research	85
3	Credit Suisse	71
4	Kepler Cheuvreux	70
5	Zacks Equity Research	62
6	RBC Capital Markets	57
7	UBS Equities	55
8	Barclays	54
9	JPMorgan	54
10	Morgan Stanley	50
11	Societe Generale	50
12	Commerzbank Corporate Clients	42
13	Moody's Investors Services	42
14	BNP Paribas Exane	31
15	CFRA Equity Research	30
16	BuySellSignals Research	25
17	Trefis	23
18	Sadif Analytics Prime	22
19	UniCredit Research	22
20	DBRS Morningstar	19
21	Natixis FICC Research	18
22	Wright Reports	18
23	ESN/ equinet Bank (Germany)	17
24	JPMorgan Econ & FI	16
25	Pareto Securities AS	15
26	Banco Santander	14
27	HSBC	14
28	GlobalData	13
29	ValuEngine, Inc	13
30	Warburg Research GmbH	13
31	Berenberg	10
32	Macquarie Research	8
33	Scope Ratings	8
34	Validea	8
35	IHS Technology	7
36	Acquisdata	5
37	Corporate Watchdog Reports	5
38	Financiële Diensten Amsterdam	4
39	Millennium BCP	3
40	The Business Research Company	3
41	CFRA Quantitative Report	2

Exhibit 5A**Deutsche Bank AG****Number of Analyst Reports by Company**

Source: Refinitiv Eikon, Bloomberg

Abridged Search with Company Name as Primary Ticker Only

Number	Analyst Name	Reports
42	Fitch Ratings	2
43	Morgan Stanley Fixed Income Research	2
44	Hammer Partners	2
45	Arbat Capital	1
46	Audit Analytics	1
47	BCC-Invest	1
48	BNP Paribas Personal Investors	1
49	Edison Investment Research	1
50	Eugene Investment & Securities	1
51	Keefe, Bruyette & Woods	1
52	M.R. Finanzmarktberatung GmbH	1
53	Marktfeld	1
54	New Generation Research	1
55	NUS RMI-CRI	1
56	S3 Partners	1
57	SSIF Tradeville	1
58	Timetric	1
59	Vermilion Technical Research	1
	Total Analyst Reports in Class Period	1,211

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
3/15/2017	BofA Global Research	Deutsche Bank: Why we are not Overweight (mostly)
3/15/2017	CFRA Equity Research	Deutsche Bank AG Ord
3/20/2017	Societe Generale	Deutsche Bank AG (Sell, TP=€11.5) - Corporate news - New guidance released by management with launch of €8bn rights issue - A. Lim (3p)
3/21/2017	BofA Global Research	Deutsche Bank: Ex-rights: reiterate Underperform
3/29/2017	Trefis	Trefis Report: Deutsche Bank - \$18.00 Trefis Price Estimate
4/7/2017	Morgan Stanley	Deutsche Bank: Resuming Coverage at Equal-weight
4/10/2017	Morningstar, Inc.	Morningstar Deutsche's capital increase soothes concerns but tarnished image still needs to be fixed.
4/10/2017	Morningstar, Inc.	Morningstar Deutsche's capital increase soothes concerns but tarnished image still needs to be fixed.
4/12/2017	Morningstar, Inc.	Morningstar DBK Updated Forecasts and Estimates from 12 Apr 2017
4/12/2017	Sadif Analytics Prime	Is Deutsche Bank AG In Need of A Cure?
4/13/2017	Morningstar, Inc.	Morningstar DB Updated Forecasts and Estimates from 12 Apr 2017
4/13/2017	Morningstar, Inc.	Morningstar Deutsche's capital increase soothes concerns, but its tarnished image still needs to be fixed.
4/13/2017	Morningstar, Inc.	Morningstar Deutsche's capital increase soothes concerns, but its tarnished image still needs to be fixed.
4/20/2017	Barclays	Deutsche Bank AG: Self-help needs to continue
4/20/2017	RBC Capital Markets	Deutsche Bank - Revenue momentum lacking
4/20/2017	RBC Capital Markets	UK & European Research at a Glance - April 20, 2017
4/21/2017	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Q1 net profit of €0.7bn expected
4/21/2017	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - DAX at 12,900 if investors had no auto worries
4/21/2017	Macquarie Research	Macquarie: Deutsche Bank (Upgrade to Outperform) - A price for everything: upgrade to OP
4/21/2017	Validea	Validea Guru Analysis Report for DB. Analysis using Validea's interpretation of the published quantitative strategies of well-known Wall Street experts including Peter Lynch, Warren Buffett, Ben Graham and Ken Fisher, among others.
4/23/2017	JPMorgan	Deutsche Bank : Show me stock with 6.8% RoTE in 2019E requires 30% upside, entry point €14: Remain N
4/24/2017	Kepler Cheuvreux	Espresso Note Deutsche Bank Buy Expecting an encouraging start into 2017
4/25/2017	BofA Global Research	Deutsche Bank: Profitability mirage set to fade: IT cost and NII deep-dive
4/26/2017	Vermilion Technical Research	Int'l Compass: Widespread base breakouts, from Germany to India; overweight cyclicals; bullish technicals + EPS estimate momentum screen/chart book
4/26/2017	Warburg Research GmbH	Preview: Solid start to 2017 expected; Model update
4/26/2017	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
4/27/2017	Barclays	First Look: Deutsche Bank 1Q17 - Revenue bounce disappoints: Deutsche Bank Initial 1Q17
4/27/2017	Barclays	First Look: Deutsche Bank 1Q17 - Revenue bounce disappoints
4/27/2017	BofA Global Research	Deutsche Bank: SPEED READ: Revenues disappoint
4/27/2017	BofA Global Research	Deutsche Bank: 1Q17: smaller balance sheet and revenue rebound than expected
4/27/2017	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Q1 net profit below our estimate
4/27/2017	JPMorgan	Deutsche Bank : Cost savings bearing fruit but revenue performance below expectations: Remain Neutral
4/27/2017	JPMorgan	Deutsche Bank : Revenues disappointing across the board, with Global Markets underperforming peers yet again: Remain N
4/27/2017	Kepler Cheuvreux	Espresso Note Deutsche Bank Buy Q1 first reactions: revenues disappoint
4/27/2017	Morgan Stanley	Deutsche Bank: 1st Take: Mixed set of numbers - better costs, more needed on the top line
4/27/2017	Morgan Stanley	Deutsche Bank: Long dated delivery

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
4/27/2017	Morningstar, Inc.	Morningstar While Q1 Bottom Line Improves, Deutsche Bank's Operational Performance Lacks Spark and Momentum
4/27/2017	Morningstar, Inc.	Morningstar While Q1 Bottom Line Improves, Deutsche Bank's Operational Performance Lacks Spark and Momentum
4/27/2017	Natixis FICC Research	Morning News - Deutsche Bank : Un T1 17 : sans litige ...mais sans éclat!
4/27/2017	Natixis FICC Research	Morning News - Deutsche Bank : Q1 17: no legal costs... but nothing exciting!
4/27/2017	RBC Capital Markets	Deutsche Bank - DBK - Q1 17 lacks revenue momentum
4/27/2017	UBS Equities	First Read: Deutsche Bank "Q1 17: Weak revenues, in-line costs" (Neutral)
4/27/2017	UniCredit Research	Credit Comment - Deutsche Bank: Reports neutral 1Q17 figures; challenges remain
4/27/2017	ValuEngine, Inc	ValuEngine Rating and Forecast Report for DB
4/28/2017	BofA Global Research	Deutsche Bank: NII headwinds to continue
4/28/2017	CFRA Equity Research	Deutsche Bank AG Ord
4/28/2017	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Interesting restructuring case: BUY, TP EUR 19.00 - Post Results
4/28/2017	Financiële Diensten Amsterdam	Deutsche Bank Aktiengesellschaft, Company Analysis - Investment Update
4/28/2017	Macquarie Research	Macquarie: Deutsche Bank (Outperform) - The start not the end
4/28/2017	RBC Capital Markets	Deutsche Bank - Unconvincing bounce back
4/28/2017	RBC Capital Markets	UK & European Research at a Glance - April 28, 2017
4/28/2017	Societe Generale	Deutsche Bank AG - Equity/Credit review - Franchise still losing market share
4/28/2017	Trefis	Trefis Report: Deutsche Bank - \$18.00 Trefis Price Estimate
4/28/2017	UBS Equities	Deutsche Bank "Q1 2017: We remain positive on costs and capital" (Neutral)
5/2/2017	Eugene Investment & Securities	Deutsche Bank - 흑자전환으로 시장우려는 해소되고 있으나 수익 개선은 크지 않은 수준
5/3/2017	Berenberg	Deutsche Bank - The day the leverage died
5/3/2017	BuySellSignals Research	Deutsche Bank increases 7% in 2017, outperforming 91% of its global peers
5/19/2017	Credit Suisse	DBKGn.F: Deutsche Bank - Reinstate an Underperform rating
5/19/2017	Credit Suisse	First Edition Summary Europe
5/19/2017	Credit Suisse	Second Edition Summary Europe
5/19/2017	Credit Suisse	Around The Clock
5/22/2017	JPMorgan	Global Investment Bank Tracker : Equities doing better than FICC QTD in Q2: Prefer GS and MS over DBK
5/23/2017	Barclays	Deutsche Bank AG: Long road to recovery
5/26/2017	CFRA Equity Research	Deutsche Bank AG Ord
5/30/2017	UBS Equities	Deutsche Bank "UBS Evidence Lab supports our positive view on costs, ..."
6/2/2017	Fitch Ratings	Deutsche Postbank AG - Mortgage Pfandbriefe
6/6/2017	DBRS Morningstar	DBRS Confirms Deutsche Bank's A (low) Rating, Trend Revised to Stable
6/8/2017	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
6/9/2017	BofA Global Research	Deutsche Bank: Rates imply NII problem to continue
6/12/2017	Banco Santander	Santander GCB: Deutsche Bank: Rate Rises Not Enough to Buy the Stock
6/14/2017	DBRS Morningstar	DBRS Releases Report on Deutsche Bank AG
6/20/2017	BNP Paribas Personal Investors	Semanal Análisis Técnico 20.06.2017
6/20/2017	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
6/23/2017	Morningstar, Inc.	Morningstar 2017 Stress Test Results Affirm Bank Capital Strength and Capital Return Plans Should Come Next Week
6/23/2017	Morningstar, Inc.	Morningstar 2017 Stress Test Results Affirm Bank Capital Strength and Capital Return Plans Should Come Next Week
6/23/2017	Morningstar, Inc.	Morningstar We Prefer Banks With Individual Issues to Rate-Sensitive Names

Exhibit 5B

Deutsche Bank AG

List of Analyst Reports

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
6/23/2017	Morningstar, Inc.	Morningstar We Prefer Banks With Individual Issues to Rate-Sensitive Names
6/23/2017	Societe Generale	US Banks - DFAST results point to strong excess capital at the universal banks
6/29/2017	Morningstar, Inc.	Morningstar Several Undervalued Banks Stand to Benefit from 2017 CCAR Results and Capital Return Plans
6/29/2017	Morningstar, Inc.	Morningstar Several Undervalued Banks Stand to Benefit from 2017 CCAR Results and Capital Return Plans
7/3/2017	Credit Suisse	EU Investment Banks: Market share movements
7/4/2017	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Deutsche Bank Blue Chips Stockguide July 2017 - Blue Chips Stockguide
7/12/2017	Sadif Analytics Prime	Is Deutsche Bank AG Worth a Higher Bid?
7/20/2017	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Fixed income-driven profit decline expected for Q2
7/21/2017	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Q2 reporting season: momentum is still positive but ...
7/21/2017	JPMorgan	Deutsche Bank : Model Update
7/22/2017	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
7/23/2017	Natixis FICC Research	Q2 17 Earnings: 27/07/17 -
7/25/2017	Banco Santander	Santander GCB: Santander European Daily, Tuesday, 25 July 2017
7/25/2017	Banco Santander	Santander GCB: Deutsche Bank: 2Q17E Results Preview
7/27/2017	BofA Global Research	Deutsche Bank: SPEED READ: 2Q numbers quite weak
7/27/2017	BofA Global Research	Deutsche Bank: 2Q17: CIB and NII disappoint
7/27/2017	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Net profit in line, fixed income disappointed in Q2
7/27/2017	Credit Suisse	DBKGn.F: Deutsche Bank - 2Q17: Revenue miss offset by lower charges
7/27/2017	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Q2 EBT above forecast due to lower costs/risk provisions - Flash note
7/27/2017	Financiële Diensten Amsterdam	Deutsche Bank Aktiengesellschaft, Company Analysis - Investment Update
7/27/2017	JPMorgan	Deutsche Bank : CIB still losing market share to US peers: Remain N on P/TBV support
7/27/2017	JPMorgan	Deutsche Bank : Cutting estimates on weaker revenue performance
7/27/2017	Kepler Cheuvreux	Espresso Note Deutsche Bank Buy Weak revenues, takes time to rebuild franchise
7/27/2017	Moody's Investors Services	Deutsche Bank AG: Q2 2017 Results: Weak revenues partly offset by further cost savings as restructuring progresses
7/27/2017	Morgan Stanley	Deutsche Bank: PBT beat, but weak i-bank - mixed read
7/27/2017	Morgan Stanley	Deutsche Bank: Weak i-bank keeps lid on valuation
7/27/2017	Morningstar, Inc.	Morningstar While Deutsche Makes Progress With Restructuring, Weaker Revenue Generation Continues as Expected
7/27/2017	Morningstar, Inc.	Morningstar While Deutsche Makes Progress With Restructuring, Weaker Revenue Generation Continues as Expected
7/27/2017	Natixis FICC Research	Morning News - Deutsche Bank : A long road ahead
7/27/2017	Natixis FICC Research	Morning News - Deutsche Bank : Le chemin reste long
7/27/2017	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Q2: CIB miss
7/27/2017	RBC Capital Markets	Deutsche Bank AG - No quick fix
7/27/2017	UBS Equities	First Read: Deutsche Bank "Q2 2017: Adj PBT is 13% higher than expected, ..."
7/27/2017	ValuEngine, Inc	ValuEngine Rating and Forecast Report for DB
7/27/2017	Hammer Partners	Deutsche Bank, Weaker than expected Q2
7/28/2017	Credit Suisse	DBKGn.F: Deutsche Bank - 2Q17: Revenue miss weighs on performance
7/28/2017	Macquarie Research	Macquarie: Deutsche Bank (Downgrade to Neutral) - No quick fix
7/28/2017	Societe Generale	Deutsche Bank AG - Equity/Credit review - 2Q17 results – No end in sight to CIB shrinkage. Leverage concerns persist. Sell
7/28/2017	Trefis	Trefis Report: Deutsche Bank - \$18.00 Trefis Price Estimate

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
7/28/2017	Validea	Validea Guru Analysis Report for DB. Analysis using Validea's interpretation of the published quantitative strategies of well-known Wall Street experts including Peter Lynch, Warren Buffett, Ben Graham and Ken Fisher, among others.
8/4/2017	CFRA Equity Research	Deutsche Bank AG Ord
8/4/2017	Scope Ratings	Deutsche Bank: Keep Calm and Carry On
8/4/2017	Societe Generale	Deutsche Bank AG – Update on funding plans post fixed income investor call
8/17/2017	BuySellSignals Research	Deutsche Bank second worst performer of DAX Index in 2017
8/18/2017	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
8/30/2017	BNP Paribas Exane	INVESTMENT BANKS : Wealth winners
8/31/2017	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Buy case confirmed with a new TP of EUR 17.50 (19.00) - Flash note
9/4/2017	Credit Suisse	DBKGn.F: Deutsche Bank - Upgrade to Neutral after recent weakness
9/4/2017	Credit Suisse	First Edition Summary Europe: 4 September 2017
9/4/2017	Credit Suisse	Second Edition Summary Europe
9/4/2017	Credit Suisse	Around The Clock
9/11/2017	Societe Generale	Global Investment Banks - Deep dive into profitability and capital returns
9/11/2017	Societe Generale	Deutsche Bank AG (Sell, TP=€10.5) - 12m target downgrade - Ongoing franchise issues and €3bn capital deficit persist - A. Lim (7p)
9/12/2017	Societe Generale	Global Investment Banks - Deep dive into profitability and capital return
9/15/2017	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
9/20/2017	S3 Partners	S3 Analytics: Short interest continues to rise on the Banks, coming into 3Q earnings.
9/21/2017	HSBC	Deutsche Bank (DBK GR):-Upgrade to Hold: Outlook remains uncertain
9/22/2017	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
9/22/2017	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
9/29/2017	Morningstar, Inc.	Morningstar DBK Updated Star Rating from 29 Sep 2017
10/2/2017	BNP Paribas Exane	INVESTMENT BANKS : Updating estimates for recent market moves
10/4/2017	Moody's Investors Services	Deutsche Bank AG: Quarterly Update
10/6/2017	RBC Capital Markets	Global Investment Banks: Capital Markets scorecard September 2017
10/12/2017	BNP Paribas Exane	INVESTMENT BANKS : Capital Cross-Check
10/17/2017	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Deutsche Bank Blue Chips Stockguide October 2017 - Blue Chips Stockguide
10/18/2017	Credit Suisse	EU investment banks: US banks 3Q17 read-across
10/18/2017	Morningstar, Inc.	Morningstar While Deutsche's capital concerns ease, but its tarnished image and challenges continue.
10/18/2017	Morningstar, Inc.	Morningstar While Deutsche's capital concerns ease, but its tarnished image and challenges continue.
10/19/2017	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
10/22/2017	Natixis FICC Research	Q3 17 Earnings: 26/10/17 -
10/24/2017	Warburg Research GmbH	Vorschau Q3: Erträge weiter unter Druck
10/25/2017	Warburg Research GmbH	Preview Q3: Revenues remain under pressure
10/26/2017	BNP Paribas Exane	DEUTSCHE BANK (-): Reducing numbers after 3Q, further below consensus
10/26/2017	BofA Global Research	Deutsche Bank: 3Q17: operating leverage hurts as revenues miss
10/26/2017	BofA Global Research	Deutsche Bank: SPEED READ: 3Q was weak
10/26/2017	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Q3 profit above estimate due to lower one-off expenses
10/26/2017	Credit Suisse	DBKGn.F: Deutsche Bank - 3Q17: FICC/CET1 miss and Corp centre beat

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
10/26/2017	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Q3 results broadly in line with expectations - Flash note
10/26/2017	Financiële Diensten Amsterdam	Deutsche Bank Aktiengesellschaft, Company Analysis - Investment Update
10/26/2017	JPMorgan	Deutsche Bank : Low Quality result - all eyes on poor CIB performance: Remain N
10/26/2017	JPMorgan	Deutsche Bank : No sign of market share stabilization yet: Remain Neutral at 0.5x TBV
10/26/2017	Kepler Cheuvreux	Espresso Note Deutsche Bank Buy The restructuring story continues
10/26/2017	Kepler Cheuvreux	Q3 2017 results
10/26/2017	Morgan Stanley	Deutsche Bank: 3Q17: Weak FICC, decent cost print
10/26/2017	Morgan Stanley	Deutsche Bank: Q3 Analyst Conference Call Feedback
10/26/2017	Morgan Stanley	Deutsche Bank: 3Q17: Slower progress, markets' glut. Price target down to €15.
10/26/2017	Morningstar, Inc.	Morningstar Deutsche's Results Better Than Expected, but Overhang on Shares Persists Due to High Uncertainty
10/26/2017	Morningstar, Inc.	Morningstar Deutsche's Results Better Than Expected, but Overhang on Shares Persists Due to High Uncertainty
10/26/2017	Natixis FICC Research	Morning News - Deutsche Bank : Still a long way to go
10/26/2017	Natixis FICC Research	Morning News - Deutsche Bank : Le chemin reste long
10/26/2017	RBC Capital Markets	Deutsche Bank AG - DBK - Progress on costs not enough to offset headwinds
10/26/2017	UBS Equities	First Read: Deutsche Bank "Q3 2017: Revenues in-line with low expectations, ..."
10/26/2017	ValuEngine, Inc	ValuEngine Rating and Forecast Report for DB
10/27/2017	Credit Suisse	DBKGn.F: Deutsche Bank - 3Q17: Franchise concern vs. low valuation
10/27/2017	Macquarie Research	Macquarie: Deutsche Bank (Underperform) - Lowering our sights again
10/27/2017	RBC Capital Markets	Deutsche Bank AG - Limited operating leverage
10/27/2017	Societe Generale	Deutsche Bank AG - Equity/Credit review - 3Q17 results: never-ending woes
10/28/2017	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
10/30/2017	Moody's Investors Services	Deutsche Bank AG: Q3 2017 Results: Progress on strategy, strong cost control and lower cost of risk mitigate weak revenues
10/31/2017	DBRS Morningstar	DBRS: DB Reports Improved 3Q17 Results with Lower Costs, Headwinds to Revenue Growth Remain
10/31/2017	Trefis	Trefis Report: Deutsche Bank - \$18.00 Trefis Price Estimate
11/1/2017	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
11/1/2017	UBS Equities	Deutsche Bank "Are operating profits at the inflection point?" (Neutral)
11/3/2017	Validea	Validea Guru Analysis Report for DB. Analysis using Validea's interpretation of the published quantitative strategies of well-known Wall Street experts including Peter Lynch, Warren Buffett, Ben Graham and Ken Fisher, among others.
11/6/2017	BNP Paribas Exane	INVESTMENT BANKS : Where are we now: outlook after 3Q
11/10/2017	BuySellSignals Research	Deutsche Bank jumps 23%
11/10/2017	Morgan Stanley	Deutsche Bank: DBK + Postbank: patience required
11/12/2017	M.R. Finanzmarktberatung GmbH	Investment-Fokus: Deutsche Bank
11/13/2017	RBC Capital Markets	Deutsche Bank AG - Deutsche Bank - moving ahead with DeAM IPO - press reports
11/14/2017	HSBC	Deutsche Bank (DBK GR):-Upgrade to Buy: Optionality through capital excess
11/15/2017	UBS Equities	First Read: Deutsche Bank "UBS European Conference 2017 - Feedback from CEO ..."
11/17/2017	Scope Ratings	Scope Ratings downgrades Deutsche Bank's ratings (Issuer Rating to BBB+); Stable Outlook
11/20/2017	Societe Generale	Deutsche Bank AG (Sell, TP=€10.5) - Corporate news - Two bad banks do not make a good bank - A. Lim (6p)
11/21/2017	Fitch Ratings	Deutsche Postbank AG - Mortgage Pfandbriefe
11/24/2017	Scope Ratings	Scope Ratings affirms AAA/Stable on Deutsche Bank's German mortgage-covered bonds

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
11/27/2017	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
12/1/2017	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
12/4/2017	Credit Suisse	DBKGn.F: Deutsche Bank - Raising PT for restructuring potential
12/6/2017	Morgan Stanley	Deutsche Bank - Evolving Equity Story
12/8/2017	UniCredit Research	Sector Flash - Basel IV reforms approved
12/11/2017	BNP Paribas Exane	EUROPEAN BANKS : Basel 4 - the dog that barked quietly
12/13/2017	HSBC	Deutsche Bank (DBK GR):-Buy: How much is DWS worth?
12/14/2017	UBS Equities	First Read: Bank Zachodni WBK SA "Acquisition of Deutsche Bank Polska"
12/14/2017	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
12/19/2017	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
12/19/2017	Moody's Investors Services	Deutsche Bank AG: Quarterly Update
12/19/2017	Scope Ratings	Deutsche Bank AG Issuer Rating Report
12/21/2017	Moody's Investors Services	Deutsche Bank Trust Corporation: Update to credit analysis
1/5/2018	Morgan Stanley	Deutsche Bank: Pre-release: US tax impact and 4Q w/lying PBT loss
1/5/2018	RBC Capital Markets	Deutsche Bank AG - DBK - Moving backwards
1/7/2018	Natixis FICC Research	Morning News - Deutsche Bank : Another difficult quarter in the CIB
1/7/2018	Natixis FICC Research	Morning News - Deutsche Bank : Un autre trimestre difficile dans la BFI
1/8/2018	HSBC	Deutsche Bank (DBK GR):-Downgrade to Hold: IB turn-around delayed yet again
1/8/2018	JPMorgan	Deutsche Bank : Market share loss ongoing - only support is 0.5x P/TBV 2019E: Remain Neutral
1/8/2018	Kepler Cheuvreux	Loss expected for FY 2017
1/9/2018	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
1/9/2018	Societe Generale	Global Investment Banks - Taking profits ahead of a cycle turn. Downgrading BoA, JPM, MS and CS
1/9/2018	Societe Generale	Deutsche Bank AG (Sell, TP=€10.5) - Rating reiterated - High conviction Sell rating reiterated - A. Lim (2p)
1/10/2018	Societe Generale	Slideshow - Taking profits ahead of a cycle downturn. Downgrading BoA, CITI, JPM and CS
1/11/2018	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Valuation remains too low: Buy with new TP of EUR 18.00 (EUR 17.50) - Flash note
1/11/2018	Moody's Investors Services	[MIS] AG:
1/11/2018	Warburg Research GmbH	Modellaktualisierung nach schwacher Unternehmensprognose für Q4/2017
1/11/2018	Warburg Research GmbH	Model update after weak company outlook for Q4 2017
1/17/2018	Sadif Analytics Prime	Is Deutsche Bank AG Stock Still Attractive?
1/19/2018	BNP Paribas Exane	DEUTSCHE BANK (-): Updating estimates to reflect profit warning and new tax guidance
1/29/2018	Natixis FICC Research	17 Earnings: 02/02/18 -
1/29/2018	UBS Equities	Deutsche Bank "Revenue growth capped given still-tight capital ratios ..."
1/30/2018	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
1/31/2018	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Preview Q4 results (2.2.2018) - Flash note
2/1/2018	Credit Suisse	DBKGn.F: Deutsche Bank - 4Q17 preview
2/2/2018	BofA Global Research	Deutsche Bank: 4Q17: costs generate miss
2/2/2018	BofA Global Research	Deutsche Bank: SPEED READ: 4Q was weak but expectedly so
2/2/2018	Credit Suisse	DBKGn.F: Deutsche Bank - 4Q17: Cost-led miss and divi uncertainty
2/2/2018	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Q4 results below expectations - Flash note
2/2/2018	Financiële Diensten Amsterdam	Deutsche Bank Aktiengesellschaft, Company Analysis - Investment Update

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
2/2/2018	JPMorgan	Deutsche Bank : Continuous restructuring mode leading to higher cost: Remain N at 0.5x TBV 2019E
2/2/2018	Kepler Cheuvreux	Consensus missed
2/2/2018	Moody's Investors Services	Deutsche Bank AG: Q4 2017 Results: Bolstered capital and liquidity shield bondholders from the blow of a quarterly loss
2/2/2018	Morgan Stanley	Deutsche Bank: 4Q: Weak Quarter, despite pre-announcement. Cost targets worse.
2/2/2018	Morningstar, Inc.	Morningstar Deutsche Results Disappoint Once Again; Risks Continue While DBK Muddles Through Restructuring
2/2/2018	Morningstar, Inc.	Morningstar Deutsche Results Disappoint Once Again; Risks Continue While DBK Muddles Through Restructuring
2/2/2018	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Q4 Costs Disappointment
2/2/2018	Trefis	Trefis Report: Deutsche Bank - \$18.00 Trefis Price Estimate
2/2/2018	UBS Equities	First Read: Deutsche Bank "Q4 2017 review: Short-term pain, long-term gain?"
2/2/2018	UBS Equities	First Read: Deutsche Bank "Q4 2017: Revs and costs worse than expected ..."
2/4/2018	Natixis FICC Research	Morning News - Deutsche Bank : Not convincing!
2/4/2018	Natixis FICC Research	Morning News - Deutsche Bank : Loin d'être convaincant !
2/5/2018	BNP Paribas Exane	DEUTSCHE BANK (-): Still loss-making, and losing earnings power
2/5/2018	BofA Global Research	Deutsche Bank: Fixing: taking longer and costing more
2/5/2018	BuySellSignals Research	Deutsche Bank plummets 59% in 5 years
2/5/2018	Credit Suisse	DBKGn.F: Deutsche Bank - 4Q17: Looking forwards not backwards
2/5/2018	DBRS Morningstar	DBRS: DB Reports Weak 4Q17 Results as CIB Revenues are Challenged and Costs Remain High •
2/5/2018	JPMorgan	Deutsche Bank : Ongoing restructuring play, unable to generate cashflow: justifies 0.5x TBV valuation
2/5/2018	Kepler Cheuvreux	New comments following results
2/5/2018	Macquarie Research	Macquarie: Deutsche Bank (Underperform) - Tearing up the script
2/5/2018	Morgan Stanley	Deutsche Bank: Work in progress. PT down to €13.4.
2/5/2018	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Where is the light at the end of the tunnel?
2/5/2018	RBC Capital Markets	UK & European Research at a Glance - February 5, 2018
2/5/2018	Societe Generale	Deutsche Bank AG (Sell, TP=€10.5) - Full-year results - High conviction Sell maintained; TP €10.5 - A. Lim (13p)
2/6/2018	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
2/7/2018	Morningstar, Inc.	Morningstar DBK Updated Star Rating from 06 Feb 2018
2/9/2018	BNP Paribas Exane	INVESTMENT BANKS : The wrong kind of volatility?
2/9/2018	Validea	Validea Guru Analysis Report for DB. Analysis using Validea's interpretation of the published quantitative strategies of well-known Wall Street experts including Peter Lynch, Warren Buffett, Ben Graham and Ken Fisher, among others.
2/9/2018	ValuEngine, Inc	ValuEngine Rating and Forecast Report for DB
2/9/2018	Warburg Research GmbH	Unbefriedigender Ausblick bei Kostenentwicklung
2/9/2018	Warburg Research GmbH	Unsatisfying outlook for cost development
2/12/2018	Societe Generale	Credit Research - Deutsche Bank AG - Credit opinion downgraded to Negative on weak 4Q17 results
2/13/2018	BofA Global Research	Deutsche Bank: Overweight. Tell only your best friends
2/15/2018	UniCredit Research	Covered Bond & Agency Monitor - 15 February 2018 - English version
2/19/2018	BofA Global Research	Deutsche Bank: Ship in a rising tide
2/27/2018	Kepler Cheuvreux	DWS IPO set to go ahead
3/3/2018	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
3/11/2018	CFRA Quantitative Report	Deutsche Bank Aktiengesellschaft
3/11/2018	Natixis FICC Research	Morning News - Deutsche Bank : Price range for DWS IPO

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
3/11/2018	Natixis FICC Research	Morning News - Deutsche Bank : Prix indicatif pour la cotation de DWS
3/12/2018	Societe Generale	Deutsche Bank AG (Sell, TP=€10) - 12m target downgrade - Even less capital improvement from DWS IPO. Sell, TP reduced to €10.0 - A. Lim (6p)
3/13/2018	DBRS Morningstar	DBRS Publishes 4Q17 European Capital Markets Roundup
3/15/2018	Arbat Capital	Banking Sector Report - Feb-2018
3/19/2018	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
3/21/2018	Morgan Stanley	Deutsche Bank: Bearish, tempered outlook for CIB in 1Q
3/21/2018	UBS Equities	First Read: Deutsche Bank "Q1 2018 profit warning or not? Stock down more ..."
3/22/2018	Morningstar, Inc.	Morningstar DB Updated Star Rating from 22 Mar 2018
3/23/2018	CFRA Quantitative Report	Deutsche Bank Aktiengesellschaft
3/26/2018	Macquarie Research	Macquarie: Deutsche Bank (Underperform) - DWS: the solution becomes part of the problem
3/26/2018	Moody's Investors Services	Deutsche Bank AG: Deutsche Bank passes a credit-positive milestone with IPO of DWS Asset Management
3/27/2018	HSBC	Deutsche Bank (DBK GR):-Hold: Time is running out
3/29/2018	BNP Paribas Exane	DEUTSCHE BANK (-): Reducing estimates and updating capital
4/3/2018	JPMorgan	Deutsche Bank : US restructuring required to improve ROE
4/8/2018	Credit Suisse	DBKGn.F: Deutsche Bank - DBK announces new CEO
4/9/2018	BofA Global Research	Deutsche Bank: Certainty on leadership could bring relief
4/9/2018	Credit Suisse	Second Edition Summary Europe: 9 April 2018
4/9/2018	Credit Suisse	Around the Clock - 9 April 2018
4/9/2018	Credit Suisse	First Edition Summary Europe
4/9/2018	HSBC	Deutsche Bank (DBK GR):-Hold: Concerns persist despite leadership changes
4/9/2018	JPMorgan	Deutsche Bank : New CEO and a "new era", but no clear strategy as yet
4/9/2018	Moody's Investors Services	Deutsche Bank AG: CEO change highlights strategic challenges still confronting Deutsche Bank
4/9/2018	Morgan Stanley	Deutsche Bank: Christian Sewing to replace John Cryan as DBK CEO
4/9/2018	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - New CEO in charge
4/9/2018	Societe Generale	Deutsche Bank AG (Sell, TP=€10) - Corporate news - Taking on the poisoned chalice. Sell, TP €10.0 reiterated - A. Lim (7p)
4/9/2018	UBS Equities	First Read: Deutsche Bank "New CEO - Same strategy?" (Neutral) Brupbacher
4/10/2018	JPMorgan	Deutsche Bank : US business analysis: Equities and IBD loss making, potential shrinkage to create value at 0.4x
4/11/2018	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
4/13/2018	Kepler Cheuvreux	Under CreditWatch negative
4/16/2018	UBS Equities	Deutsche Bank "2018 is a decisive year: IB revenue turn-around or strategic ..."
4/18/2018	BofA Global Research	Deutsche Bank: Between a rock and hard place
4/19/2018	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - The cactus among investment banks: spiky and slowly growing
4/19/2018	Credit Suisse	EU investment banks: US read-through positive for UBS
4/20/2018	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Deutsche Bank Blue Chips Stockguide April 2018 - Blue Chips Stockguide
4/20/2018	Morgan Stanley	Deutsche Bank: Cycle helps, temporary strategic vacuum
4/21/2018	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
4/23/2018	Natixis FICC Research	Q1 18 Earnings: 26/04/18 -
4/24/2018	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Deutsche Bank Blue Chips Stockguide April 2018 - Blue Chips Stockguide

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
4/24/2018	JPMorgan	Deutsche Bank : Potential US Equity restructuring of limited impact, much more is needed for L-T re-rating
4/24/2018	Sadif Analytics Prime	Is Deutsche Bank AG Worth a Higher Bid?
4/26/2018	BNP Paribas Exane	DEUTSCHE BANK (-): Earnings eroding, strategy options unclear
4/26/2018	BofA Global Research	Deutsche Bank: SPEED READ: More restructuring ahead
4/26/2018	BofA Global Research	Deutsche Bank: IB ambitions slashed...but at what cost
4/26/2018	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Q1 18 operational weak; restructuring plans address leverage issue
4/26/2018	Credit Suisse	DBKGn.F: Deutsche Bank - 1Q18: DBK reshapes its CIB
4/26/2018	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Weak Q1 results, strategic repositioning of the investment bank - Flash note
4/26/2018	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Disappointing Q1 results but downsizing of investment bank should be positive, Buy, TP EUR 14.00 (EUR 18.00) - Flash note
4/26/2018	JPMorgan	Deutsche Bank : US restructuring in sight as we anticipated – awaiting further details
4/26/2018	JPMorgan	Deutsche Bank : CIB restructuring positive for a 5% RoTE bank – awaiting more clarity: Remain Neutral
4/26/2018	Kepler Cheuvreux	DB crippled by CIB unit
4/26/2018	Macquarie Research	Macquarie: Deutsche Bank (DBK GR) (Underperform) - 1Q: miss on revenues and costs. Strategy update brief and lacks quantification
4/26/2018	Morgan Stanley	Deutsche Bank: 1Q: Adj PBT Miss: 47% below cons. Strategy Update.
4/26/2018	Morgan Stanley	Deutsche Bank: 1Q18: Weak quarter - focus on Strategy update
4/26/2018	Morningstar, Inc.	Morningstar Deutsche Bank 1Q 2018: New Management Provides Small Adjustment Restructuring-Not Very Convincing
4/26/2018	Morningstar, Inc.	Morningstar Deutsche Bank 1Q 2018: New Management Provides Small Adjustment Restructuring-Not Very Convincing
4/26/2018	Natixis FICC Research	Morning News - Deutsche Bank : Still a long way to go
4/26/2018	Natixis FICC Research	Morning News - Deutsche Bank : Tout reste à faire
4/26/2018	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK Q1 18 - cost miss, strategic plan lacks details
4/26/2018	UBS Equities	First Read: Deutsche Bank "Q1 2018 – Missing lowered expectations and ..."
4/27/2018	Credit Suisse	DBKGn.F: Deutsche Bank - Post Q1: New CIB strategy not clear
4/27/2018	Macquarie Research	Macquarie: Deutsche Bank (Underperform) - New strategy sheds little light
4/27/2018	Moody's Investors Services	Rating Action - Deutsche Bank AG - Excel data
4/27/2018	Moody's Investors Services	Moody's affirms all Deutsche Bank ratings, changes outlook to negative on A3 rated deposits
4/27/2018	Morgan Stanley	Deutsche Bank: 1Q18: Strategic context helpful, numbers a reminder of the scale of restructuring task
4/27/2018	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Path to higher return unclear
4/27/2018	Societe Generale	Deutsche Bank AG - Equity/Credit review - Deleveraging to fill a capital hole... again
4/30/2018	Kepler Cheuvreux	Negative outlook by Moody's
4/30/2018	Trefis	Trefis Report: Deutsche Bank - \$16.00 Trefis Price Estimate
5/1/2018	Moody's Investors Services	Deutsche Bank AG: Q1 2018 Results: Another strategic shift trumps poor quarterly results and increases execution challenges.
5/2/2018	Credit Suisse	DBKGn.F: Deutsche Bank - Initiating on DWS, keeping DBK at Neutral
5/3/2018	BofA Global Research	Deutsche Bank: Smaller and simpler: a difficult journey
5/3/2018	BofA Global Research	Deutsche Bank: Exchange of views
5/3/2018	Moody's Investors Services	Moody's affirms ratings of DBTC and its subsidiaries, revises outlook to Negative
5/3/2018	Morningstar, Inc.	Morningstar With its new CEO onboard, concerns on Deutsche ease little while the restructuring process drags on.
5/3/2018	Morningstar, Inc.	Morningstar With its new CEO onboard, concerns on Deutsche ease little while the restructuring process drags on.

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
5/8/2018	Moody's Investors Services	Deutsche Bank AG: Post Rating Action Update
5/9/2018	DBRS Morningstar	DBRS Confirms Deutsche Bank's A (low) Rating, Trend Revised to Negative
5/9/2018	UniCredit Research	Covered Bond & Agency Monitor - 9 May 2018 - English version
5/14/2018	Barclays	Deutsche Bank: Something Has to Change, But What?
5/14/2018	HSBC	Deutsche Bank (DBK GR):-Hold: The restructuring loop
5/16/2018	Timetric	Deutsche Postbank AG (DPB) : Company Profile and SWOT Analysis
5/18/2018	Validea	Validea Guru Analysis Report for DB. Analysis using Validea's interpretation of the published quantitative strategies of well-known Wall Street experts including Peter Lynch, Warren Buffett, Ben Graham and Ken Fisher, among others.
5/21/2018	BCC-Invest	Инвестиционная идея на международном рынке - еврооблигации Deutsche Bank, Türkiye Halk Bankası и Alfa Bank
5/21/2018	DBRS Morningstar	DBRS Releases Report on Deutsche Bank AG
5/23/2018	DBRS Morningstar	DBRS Publishes 1Q18 European Capital Markets Roundup
5/24/2018	Barclays	DBK: Equities Business Review Announcement
5/24/2018	BofA Global Research	Deutsche Bank: Equities review concludes
5/24/2018	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - The cactus: losing some (smaller) spikes
5/24/2018	Credit Suisse	DBKGn.F: Deutsche Bank - AGM confirms difficult trading in Q2
5/24/2018	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Finalization of equities business strategy - Flash note
5/24/2018	HSBC	Deutsche Bank (DBK GR):-Hold: Swift, certain and more severe
5/24/2018	JPMorgan	Deutsche Bank : Restructuring positive and in the right direction but already partly discounted in our estimates
5/24/2018	Morgan Stanley	Deutsche Bank: AGM Strategic Update
5/24/2018	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Updated targets already in our estimates
5/24/2018	Societe Generale	Deutsche Bank AG (Sell, TP=€8) - Corporate news - A few more details, but we retain our negative conclusion (2p)
5/24/2018	UBS Equities	First Read: Deutsche Bank "Further IB rightsizing – Not a U-turn we think"
5/29/2018	UBS Equities	Deutsche Bank "Further IB rightsizing and more rigorous cost management – ..."
5/31/2018	Barclays	Deutsche Bank - DBTCA - Press Reports on FDIC status
5/31/2018	BofA Global Research	Deutsche Bank: Erroneous FT report hits valuations
5/31/2018	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Correction: DBK - New headwinds emerge
6/1/2018	Barclays	DBK: S&P Rating Downgrade
6/1/2018	BofA Global Research	Deutsche Bank: Qualitative not quantitative issues
6/1/2018	Kepler Cheuvreux	Limited downgrade
6/1/2018	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Uphill struggle
6/1/2018	Societe Generale	Deutsche Bank AG (Sell, TP=€8) - Corporate news - Thoughts on possible "troubled condition" status - A. Lim (2p)
6/4/2018	BNP Paribas Exane	INVESTMENT BANKS : Difficult for Deutsche, bother for Barclays: investment banking still looks too tough
6/7/2018	Morgan Stanley	Deutsche Bank: Slow burn restructuring
6/7/2018	RBC Capital Markets	DBK - CBK combination doing the rounds again
6/7/2018	UBS Equities	First Read: Deutsche Bank "The 10% 2021 ROTE target implies cEUR32bn ..."
6/8/2018	BofA Global Research	Deutsche Bank: Smaller or bigger-
6/10/2018	Barclays	DBK: Thoughts Following Recent Events
6/11/2018	Warburg Research GmbH	Model Update: Weaker Q2 expected

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
6/13/2018	Moody's Investors Services	Moody's assigns Counterparty Risk Ratings to rated bank subsidiaries and branches of HSBC Holdings plc, Deutsche Bank AG, BNP Paribas, Societe Generale, Credit Suisse Group AG, UBS Group AG, and to Barclays Bank PLC and its rated branches
6/18/2018	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
6/18/2018	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
6/22/2018	Kepler Cheuvreux	Outlook downgraded to negative
6/22/2018	Morningstar, Inc.	Morningstar 2018 Stress Test Results Tougher Than Last Year, Capital Return Plans Coming Next Week
6/22/2018	Morningstar, Inc.	Morningstar 2018 Stress Test Results Tougher Than Last Year, Capital Return Plans Coming Next Week
6/25/2018	Societe Generale	Global Investment Banks - Tough markets bring déjà vu for the investment banks
6/28/2018	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
6/28/2018	RBC Capital Markets	DBK - US subsidiary's capital plan objected by the FED in 2018 CCAR (for qualitative reasons)
6/29/2018	UBS Equities	First Read: Deutsche Bank "Fails CCAR – Not unexpected" (Neutral) Brupbacher
7/3/2018	Morningstar, Inc.	Morningstar Tougher CCAR Test Than Last Year, Overall, No Serious Restrictions For Our Coverage Universe
7/3/2018	Morningstar, Inc.	Morningstar Tougher CCAR Test Than Last Year, Overall, No Serious Restrictions For Our Coverage Universe
7/3/2018	NUS RMI-CRI	Weekly Credit Brief (Jun 26 - Jul 02)
7/4/2018	DBRS Morningstar	DBRS Places Long-Term Senior Debt of 6 German Banking Groups Under Review With Negative Implications
7/11/2018	Kepler Cheuvreux	Negative spiral
7/11/2018	Kepler Cheuvreux	New publication: Negative spiral
7/11/2018	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
7/12/2018	Moody's Investors Services	Deutsche Bank Trust Corporation: Update to credit analysis
7/13/2018	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Q2 preview: CIB remains under pressure
7/16/2018	Barclays	DBK: Q218 Positive Pre-announcement
7/16/2018	BofA Global Research	Deutsche Bank: 2Q headlines come in better than consensus
7/16/2018	BofA Global Research	Deutsche Bank: 2Q18: not as bad as you thought
7/16/2018	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Earnings weak, but capital improved – Upgrade to Hold
7/16/2018	JPMorgan	Deutsche Bank : Positive trend on Capital ratio build – Revenue stabilization key for a restructuring bank at 0.4x TBV
7/16/2018	Morgan Stanley	Deutsche Bank: DBK pre-announces Q2
7/16/2018	Morningstar, Inc.	Morningstar Deutsche Bank Announces Preliminary 2Q Results
7/16/2018	Morningstar, Inc.	Morningstar Deutsche Bank Announces Preliminary 2Q Results
7/16/2018	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Low-quality beat
7/16/2018	UBS Equities	First Read: Deutsche Bank "Q2 2018 pre-announcement is reassuring. CIB ..."
7/17/2018	Hammer Partners	Deutsche Bank, Preliminary results: Upgrade to Neutral
7/17/2018	HSBC	Deutsche Bank (DBK GR):-Hold: Capital progress makes systemic fears abate
7/17/2018	Kepler Cheuvreux	Q2 results expected above consensus
7/17/2018	UniCredit Research	Sector Flash - Covered Bonds: Long-dated Deutsche Bank Pfandbrief attractive
7/19/2018	Credit Suisse	European investment banks: Positive on UBS after US Q2 results
7/19/2018	UBS Equities	Deutsche Bank "UBS Evidence Lab analytics could support a more radical ..."
7/25/2018	Barclays	First Look: DBK Q218 - Underlying results inline/slightly weaker
7/25/2018	BNP Paribas Exane	DEUTSCHE BANK (-): Still struggling to regain momentum
7/25/2018	BofA Global Research	Deutsche Bank: Capital better as CIB better, retail weaker

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
7/25/2018	BofA Global Research	Deutsche Bank: 2Q update
7/25/2018	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - The cactus: More robust but the drought is not over
7/25/2018	JPMorgan	Deutsche Bank : Restructuring on track – but not out of the woods yet on revenues: Remain Neutral
7/25/2018	JPMorgan	Deutsche Bank : Restructuring delivering on capital/costs but a "show me" stock on revenues: Maintain Neutral
7/25/2018	Kepler Cheuvreux	Espresso Note Deutsche Bank Reduce No devil in the details
7/25/2018	Kepler Cheuvreux	Good Q2
7/25/2018	Moody's Investors Services	Deutsche Bank AG: Q2 2018: Maintaining balance sheet strength while reengineering.
7/25/2018	Morgan Stanley	Deutsche Bank: 2Q18: Progress on deleveraging - can we see more?
7/25/2018	Morgan Stanley	Deutsche Bank: Top line trajectory remains uncertain
7/25/2018	Morningstar, Inc.	Morningstar Deutsche Bank 2Q 2018: Slightly Better Than Our Expectations; FVE Maintained
7/25/2018	Morningstar, Inc.	Morningstar Deutsche Bank 2Q 2018: Slightly Better Than Our Expectations; FVE Maintained
7/25/2018	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK Q2 18 - slightly weaker than expected; restructuring on track
7/25/2018	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Revenues remain key for ROTE improvement
7/25/2018	Trefis	Trefis Report: Deutsche Bank - \$15.00 Trefis Price Estimate
7/25/2018	UniCredit Research	Sector Flash - Do covered bonds become more attractive when compared to govies?
7/25/2018	ValuEngine, Inc	ValuEngine Rating and Forecast Report for DB
7/26/2018	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
7/26/2018	Credit Suisse	DBKGn.F: Deutsche Bank - Post 2Q18: Uncertain outlook persists
7/26/2018	DBRS Morningstar	DBRS Publishes Commentary on DB's 2Q18 Results
7/26/2018	Kepler Cheuvreux	Espresso Note Deutsche Bank Reduce Keep muddling through
7/26/2018	Societe Generale	Deutsche Bank AG - Equity/Credit review - Better capital, but profitability and leverage still a problem
7/26/2018	UniCredit Research	Covered Bond & Agency Monitor - 26 July 2018 - English version
7/26/2018	UniCredit Research	Covered Bond & Agency Monitor - 26. Juli 2018 - German version
7/27/2018	Morningstar, Inc.	Morningstar DB Updated Forecasts and Estimates from 27 Jul 2018
7/28/2018	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
7/28/2018	Morningstar, Inc.	Morningstar DBK Updated Forecasts and Estimates from 27 Jul 2018
7/30/2018	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
8/2/2018	New Generation Research	August 2018 Turnaround Letter
8/3/2018	Barclays	Deutsche Bank: Q218 Review - Challenges Continue
8/3/2018	Moody's Investors Services	Moody's downgrades Deutsche Bank legacy senior debt to Baa3 following change in bank insolvency law and affirms A3 counterparty and deposit ratings
8/6/2018	Sadif Analytics Prime	Is Deutsche Bank AG Stock Still Attractive?
8/8/2018	HSBC	Deutsche Bank (DBK GR):-Hold: Is stronger capital the antidote for operational weakness?
8/13/2018	BofA Global Research	Deutsche Bank: Downgrade: Smaller balance sheet, smaller profits
8/14/2018	Moody's Investors Services	Deutsche Bank AG: Post Rating Action Update
8/22/2018	UBS Equities	Deutsche Bank "What YOU think are the most important issues for Deutsche ..."
8/23/2018	Berenberg	Deutsche Bank (DBK GY) - Slowly fading away
8/23/2018	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
8/24/2018	Validea	Validea Guru Analysis Report for DB. Analysis using Validea's interpretation of the published quantitative strategies of well-known Wall Street experts including Peter Lynch, Warren Buffett, Ben Graham and Ken Fisher, among others.

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
8/28/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
8/29/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
8/30/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
8/31/2018	BofA Global Research	Deutsche Bank: Is DB senior preferred cheap-
8/31/2018	Moody's Investors Services	[MIS] ドイツ銀行AG: 格付アクション後のアップデート
9/3/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
9/5/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
9/6/2018	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
9/6/2018	UniCredit Research	Covered Bond & Agency Monitor - 6 September 2018 - English version
9/6/2018	UniCredit Research	Covered Bond & Agency Monitor - 6. September 2018 - German version
9/6/2018	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
9/7/2018	Keefe, Bruyette & Woods	Deutsche Bank [DBK.GR], HNA told to exit: Draws a line under saga
9/10/2018	BofA Global Research	European Morning Credit: Deutsche Bank
9/10/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
9/11/2018	Moody's Investors Services	Deutsche Bank Trust Company Americas: Deutsche Bank subsidiary DWS' ESG money market fund is credit positive
9/11/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
9/13/2018	BofA Global Research	Deutsche Bank: A holdco structure-
9/13/2018	Morgan Stanley Fixed Income Research	Deutsche Bank: Headlines around push for DBK holdco structure
9/13/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
9/14/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
9/17/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
9/18/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
9/20/2018	Banco Santander	Santander European Daily, Thursday, 20 September 2018
9/26/2018	Kepler Cheuvreux	M&A speculation
9/26/2018	Morgan Stanley	Deutsche Bank: Merger with UBS considered according to press
9/28/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
10/1/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
10/8/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
10/9/2018	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Deutsche Bank Blue Chips Stockguide October 2018 - Blue Chips Stockguide
10/9/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
10/11/2018	Banco Santander	Santander CIB: Deutsche Bank: M&A Scenarios
10/12/2018	Banco Santander	Santander European Daily, Friday, 12 October 2018
10/12/2018	Barclays	European IBs: Thoughts ahead of Q318 results
10/12/2018	Corporate Watchdog Reports	Watchdog Report: DB - The Professional's Due Diligence Report
10/17/2018	Credit Suisse	Around The Clock: 17 October 2018
10/17/2018	Credit Suisse	DBKGn.F: Deutsche Bank - Q3 could still be challenging despite US beats
10/22/2018	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Q3 due 24 Oct.- Focus on restructuring, capital and IB revenues
10/24/2018	Barclays	First Look: DBK Q3 Results
10/24/2018	BNP Paribas Exane	DEUTSCHE BANK (-): Much at stake on a clean 4Q
10/24/2018	BofA Global Research	Deutsche Bank: P&L troubles continue as balance sheet improves

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
10/24/2018	BofA Global Research	Deutsche Bank: 3Q was OK
10/24/2018	BofA Global Research	Deutsche Bank: Earnings cuts continue
10/24/2018	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Q3 news from the cactus: continuous shrinking
10/24/2018	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Q3 results broadly in line with expectations - Flash note
10/24/2018	HSBC	Deutsche Bank (DBK GR):-Hold: Metamorphosis takes time in this environment
10/24/2018	JPMorgan	Deutsche Bank : Solid capital ratio, but key concern remains market share loss with 2% annualised RoTE
10/24/2018	JPMorgan	Deutsche Bank : Lack of operational gearing leading to ongoing ROE generation below CoE: Remain Neutral
10/24/2018	Kepler Cheuvreux	Espresso Note Deutsche Bank Reduce Q3 results: first reaction
10/24/2018	Kepler Cheuvreux	Weak Q3
10/24/2018	Moody's Investors Services	Deutsche Bank AG: Q3 2018: Balance Sheet Strength Maintained as Restructuring Intensifies
10/24/2018	Morgan Stanley	Deutsche Bank: 3Q18: PBT broadly in line, but revenue pressure continues
10/24/2018	Morgan Stanley	Deutsche Bank: Weak operating trends
10/24/2018	Morningstar, Inc.	Morningstar Deutsche Reports Uninspiring 3Q Results In Line With Our Expectations. See Updated Analyst Note from 24 Oct 2018
10/24/2018	Morningstar, Inc.	Morningstar Deutsche Reports Uninspiring 3Q Results In Line With Our Expectations. See Updated Analyst Note from 24 Oct 2018
10/24/2018	Morningstar, Inc.	Morningstar Deutsche Reports Uninspiring 3Q Results In Line With Our Expectations
10/24/2018	Morningstar, Inc.	Morningstar Deutsche Reports Uninspiring 3Q Results In Line With Our Expectations
10/24/2018	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Revenues light
10/24/2018	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Cost control comes at a cost
10/24/2018	UBS Equities	First Read: Deutsche Bank "Q3 2018: Headline beat, underlying below consensus"
10/24/2018	ValuEngine, Inc	ValuEngine Rating and Forecast Report for DB
10/25/2018	Barclays	Deutsche Bank: Q318 Review - revenues remain key
10/25/2018	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
10/25/2018	Credit Suisse	DBKGn.F: Deutsche Bank - Post Q3: Still some downside EPS risk
10/25/2018	Kepler Cheuvreux	Espresso Note Deutsche Bank Reduce Restructuring will not be enough
10/25/2018	RBC Capital Markets	UK & European Research at a Glance - October 25, 2018
10/25/2018	Societe Generale	Deutsche Bank AG - Equity/Credit review - Over-promising and under-delivering
10/25/2018	Trefis	Trefis Report: Deutsche Bank - \$13.00 Trefis Price Estimate
10/25/2018	UBS Equities	First Read: Deutsche Bank "Q3 2018: Unchanged investment case; slightly ..."
10/26/2018	BuySellSignals Research	Deutsche Bank plunges 40% in past year, hits 52-week low second time in a month
10/26/2018	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
10/29/2018	Banco Santander	Deutsche Bank: The Four Challenges (TP Cut to €8.61 from €16.52)
11/2/2018	Audit Analytics	Auditor Change Alert: DEUTSCHE BANK AKTIENGESELLSCHAFT [DB]
11/2/2018	Berenberg	Deutsche Bank (DBK GY) - The disappointment continues
11/5/2018	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - EBA stress test: 40 EU banks are more resilient
11/6/2018	UniCredit Research	The Financials and Bank Capital Chartbook - November 2018
11/8/2018	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
11/9/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
11/12/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
11/14/2018	DBRS Morningstar	DBRS Publishes 3Q18 European Capital Markets Roundup
11/15/2018	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
11/15/2018	Scope Ratings	Deutsche Bank AG Issuer Rating Report
11/15/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
11/16/2018	UBS Equities	First Read: Deutsche Bank "UBS European Conference 2018 - Feedback" (Neutral)
11/19/2018	BofA Global Research	Deutsche Bank: An LME – at last
11/20/2018	Barclays	DBK: Debt tender - thoughts on the equity
11/20/2018	Societe Generale	Banks - Thoughts from US marketing: Brexit, Global I-banks, UK challenger banks
11/21/2018	BuySellSignals Research	Deutsche Bank slumps 16% in past quarter
11/21/2018	ESN/ equinet Bank (Germany)	DEUTSCHE BANK Our patience is running out: Downgrade to Neutral, new TP EUR 8.50 - Flash note
11/21/2018	Kepler Cheuvreux	Espresso Note Deutsche Bank Reduce Entangled in Danske's AML scandal
11/23/2018	Sadif Analytics Prime	Is Deutsche Bank AG Worth a Higher Bid?
11/27/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
11/29/2018	BuySellSignals Research	Deutsche Bank slumps 17% in past quarter
11/30/2018	Barclays	DBK: Thoughts on head office raids and other recent news
11/30/2018	Kepler Cheuvreux	Police raid, bonds tumbled
11/30/2018	UniCredit Research	Daily Credit Briefing
11/30/2018	Validea	Validea Guru Analysis Report for DB. Analysis using Validea's interpretation of the published quantitative strategies of well-known Wall Street experts including Peter Lynch, Warren Buffett, Ben Graham and Ken Fisher, among others.
11/30/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
12/4/2018	Acquisdata	Deutsche Bank (NYSE- DB)
12/5/2018	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
12/7/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
12/10/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
12/11/2018	Marktfeld	Deutsche Bank AG: Ownership Timelines & Shareholder Analytics (December 2018)
12/13/2018	UniCredit Research	Daily Credit Briefing
12/17/2018	BofA Global Research	Deutsche Bank: CBK too big for DBK to swallow
12/17/2018	Credit Suisse	German Banks: DBK-CBK merger still unlikely near term
12/18/2018	BuySellSignals Research	Deutsche Bank plummets 23% in past quarter
12/18/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
12/24/2018	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
12/28/2018	BuySellSignals Research	Deutsche Bank plummets 56% in FY 2018, underperforming 88% of the market
12/28/2018	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
1/2/2019	Corporate Watchdog Reports	Watchdog Report: DB - Red Flags and Warning Signs
1/3/2019	BNP Paribas Exane	INVESTMENT BANKS : Discounting a downturn (already)
1/8/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
1/9/2019	Societe Generale	Deutsche Bank AG (Sell, TP=€5.5) - 12m target downgrade - Downward spiral continues. TP reduced 15% to €5.5 - A. Lim (4p)
1/9/2019	UBS Equities	Deutsche Bank "Q4 2018: A quarter to forget about" (Neutral) Brupbacher
1/14/2019	Moody's Investors Services	Deutsche Bank Trust Company Americas: Update to credit analysis

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
1/14/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
1/15/2019	Pareto Securities AS	Deutsche Bank-Lower capital charge for trading assets-01/15/2019
1/15/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
1/16/2019	Morgan Stanley	Deutsche Bank: DBK/Commerzbank/EUR X-border: BBG headlines
1/16/2019	Pareto Securities AS	Deutsche Bank-Q4 results (1.2.2019) should be weak-01/16/2019
1/17/2019	Barclays	Deutsche Bank: How much time does the current strategy have?
1/17/2019	BofA Global Research	Deutsche Bank: It's (too) complicated
1/17/2019	Credit Suisse	European Banks: Cutting estimates/targets post US results
1/18/2019	UniCredit Research	Sector Flash - Banks: How corporate governance is reflected in bank ratings
1/21/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
1/23/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
1/24/2019	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Additional headwinds for 2019: funding costs and risk provisions
1/25/2019	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Investors rely on successful trade negotiations and less restrictive Fed
1/25/2019	Warburg Research GmbH	Preview: Cost target should be achieved; Pressure on revenues
1/25/2019	Warburg Research GmbH	Vorschau: Kostenziel sollte erreicht werden; Druck auf die Erträge
1/25/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
1/28/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Press report about potential investment into DBK - more questions than answers
1/28/2019	UBS Equities	Deutsche Bank "The urgency to act – still a wide range of outcomes" (Neutral)
1/28/2019	ValuEngine, Inc	ValuEngine Rating and Forecast Report for DB
1/28/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
1/30/2019	Barclays	European Banks: Will funding costs be a headwind?
1/31/2019	Banco Santander	Santander CIB: Deutsche Bank & DWS: 4Q18 Results Preview
2/1/2019	Barclays	First Look: DBK Q418: Weaker than anticipated, esp. FIC trading
2/1/2019	BofA Global Research	Deutsche Bank: FICC still falling
2/1/2019	BofA Global Research	Deutsche Bank: 4Q was mixed, outlook more positive
2/1/2019	BofA Global Research	Deutsche Bank: Challenge on revenues remains
2/1/2019	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Q4: FIC under pressure, costs delivery, 4% RoTE target challenging
2/1/2019	Credit Suisse	DBKGn.F: Deutsche Bank - 4Q18 first look: FICC and provision-led miss
2/1/2019	JPMorgan	Deutsche Bank : Management performing on cost and B/ST but Markets franchise continues to underperform, requires further cost measures
2/1/2019	Kepler Cheuvreux	Weak results in Q4 2018
2/1/2019	Moody's Investors Services	Deutsche Bank AG: Q4 2018: Restructuring progress meets challenging market conditions
2/1/2019	Morgan Stanley	Deutsche Bank: 4Q18: Tough End to 2018. Adj. E297mn PBT loss, vs cons at +E3mn
2/1/2019	Morgan Stanley	Deutsche Bank: Conference Call Feedback: Revenues and Capital in focus
2/1/2019	Pareto Securities AS	Deutsche Bank-Q4 results slightly below expectations-02/01/2019
2/1/2019	Pareto Securities AS	Deutsche Bank-Q4 results slightly below expectations-02/01/2019
2/1/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Cost control not enough to offset revenue weakness
2/1/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Not running quite fast enough
2/1/2019	UBS Equities	First Read: Deutsche Bank "Q4 2018 – Soft results, reassuring outlook"

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
2/1/2019	UniCredit Research	Daily Credit Briefing
2/3/2019	UBS Equities	Deutsche Bank "What YOU think are the most important issues for Deutsche ..."
2/4/2019	BNP Paribas Exane	DEUTSCHE BANK (-): From 'Plan A' to 'Plan B'?
2/4/2019	Credit Suisse	DBKGn.F: Deutsche Bank - Post 4Q18: Further reductions to estimates
2/4/2019	JPMorgan	Deutsche Bank : RoTE target 4%+ in 2019, implies 4.5% YoY revenue growth - unrealistic without CIB revenue turnaround
2/4/2019	Morningstar, Inc.	Morningstar Deutsche Celebrates First Full-Year Profit Since 2014 as It Hits Cost Saving Targets
2/4/2019	Morningstar, Inc.	Morningstar Deutsche Celebrates First Full-Year Profit Since 2014 as It Hits Cost Saving Targets
2/5/2019	Berenberg	Deutsche Bank (DBK GY) - 2019 shaping up to be a pivotal year
2/5/2019	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
2/5/2019	HSBC	Deutsche Bank (DBK GR):-Hold: Tough environment hinders progress
2/5/2019	Kepler Cheuvreux	Espresso Note Deutsche Bank Reduce Delivery in H1 or Plan B
2/5/2019	Morningstar, Inc.	Morningstar DB Updated Star Rating from 04 Feb 2019
2/5/2019	Pareto Securities AS	Deutsche Bank-Too early to invest-02/05/2019
2/6/2019	Morningstar, Inc.	Morningstar DBK Updated Star Rating from 05 Feb 2019
2/6/2019	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
2/8/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Meeting management
2/11/2019	JPMorgan	Deutsche Bank : CEO and CFO meeting feedback
2/11/2019	Moody's Investors Services	Deutsche Bank AG: Semiannual update
2/12/2019	Barclays	Deutsche Bank: Q418 Review - More of the Same
2/13/2019	JPMorgan	Deutsche Bank : Potential CBK M&A sensitivity analysis: Running the numbers
2/13/2019	Morgan Stanley	Deutsche Bank: Revenue capacity is the key issue
2/15/2019	UBS Equities	First Read: Deutsche Bank "Meeting the CEO and CFO" (Neutral) Brupbacher
2/19/2019	Trefis	Trefis Report: Deutsche Bank - \$9.00 Trefis Price Estimate
2/20/2019	UniCredit Research	Sector Flash - Spanish Cédulas: Will history repeat itself?
2/22/2019	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
2/26/2019	UniCredit Research	Sector Report RAS - EU banking package approved
2/27/2019	BNP Paribas Exane	COMMERZBANK / DEUTSCHE BANK : A stronger bank for Germany
3/2/2019	Morningstar, Inc.	Morningstar DB Updated Forecasts and Estimates from 01 Mar 2019
3/4/2019	Trefis	What Is Deutsche Bank's Fundamental Value Based On 2019 Results?
3/5/2019	Morningstar, Inc.	Morningstar DBK Updated Forecasts and Estimates from 01 Mar 2019
3/6/2019	Moody's Investors Services	Deutsche Bank AG:Semiannual update
3/6/2019	Morningstar, Inc.	Morningstar All Aboard the Money Laundering Train; New Reports Implicate More European Banks
3/6/2019	Morningstar, Inc.	Morningstar All Aboard the Money Laundering Train; New Reports Implicate More European Banks
3/8/2019	Validea	Validea Guru Analysis Report for DB. Analysis using Validea's interpretation of the published quantitative strategies of well-known Wall Street experts including Peter Lynch, Warren Buffett, Ben Graham and Ken Fisher, among others.
3/10/2019	RBC Capital Markets	DBK, CBK - Press reports about merger talks
3/11/2019	Kepler Cheuvreux	Espresso Note Deutsche Bank Reduce Big effort, meagre outcome
3/11/2019	Kepler Cheuvreux	Ongoing merger speculation
3/11/2019	UBS Equities	First Read: Deutsche Bank "Shifting probabilities – M&A with Commerzbank ..."

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
3/11/2019	UBS Equities	First Read: European Banks "Merger Monday: Deutsche Bank, Commerzbank, ..."
3/12/2019	Morgan Stanley	German Banks: Deutsche Bank - Commerzbank industrial logic in 4 exhibits
3/13/2019	JPMorgan	Deutsche Bank : Model Update
3/15/2019	BuySellSignals Research	Deutsche Bank accelerates decline, down 52% in 2 years
3/15/2019	DBRS Morningstar	DBRS: A Deutsche / Commerzbank Merger Could Present Significant Execution Challenges
3/17/2019	BofA Global Research	Deutsche Bank: Merger talks confirmed
3/17/2019	RBC Capital Markets	German Banks: Commerzbank-Deutsche Bank combination: Our survey points to revenue headwinds
3/18/2019	BofA Global Research	Deutsche Bank: Bonds bid at last
3/18/2019	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
3/18/2019	JPMorgan	Deutsche Bank : CBK merger talks confirmed as expected - running the numbers
3/18/2019	JPMorgan	Deutsche Bank : CBK M&A: sensitivity on a DWS sale scenario - unlikely as generates limited capital benefit
3/18/2019	Kepler Cheuvreux	Merger talks confirmed
3/18/2019	Morgan Stanley	German Banks: Deutsche Bank and Commerzbank announce formal talks
3/18/2019	Morningstar, Inc.	Morningstar Deutsche Bank and Commerzbank Announce Start of Merger Talks
3/18/2019	Morningstar, Inc.	Morningstar Deutsche Bank and Commerzbank Announce Start of Merger Talks
3/19/2019	Kepler Cheuvreux	New comments from S&P and Fitch
3/20/2019	Morgan Stanley	Deutsche Bank: MS Financials Conference: €21.8bn cost target for 2019 reiterated
3/21/2019	Kepler Cheuvreux	Moody's comment
3/22/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Annual report: more positive view on revenue outlook but dependent on capital markets
3/22/2019	Societe Generale	Deutsche Bank AG - Equity/Credit review - Key aspects of a potential CBK+DBK merger
3/25/2019	Barclays	Deutsche Bank: What is plan C?
3/26/2019	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
3/28/2019	Trefis	Minimal Upside From Potential Merger Of Two Struggling German Banks
3/29/2019	Credit Suisse	DBK Gn.F: Deutsche Bank - Updating our CBK merger model
3/29/2019	DBRS Morningstar	DBRS Confirms Deutsche Bank's A (low) Rating, Trend Still Negative
4/1/2019	JPMorgan Ecom & FI	Deal or No Deal? : Trade Ideas on DB & CMZB Perpetuals
4/4/2019	UBS Equities	Deutsche Bank "M&A with Commerzbank – fewer available options given tough ..."
4/4/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
4/5/2019	BNP Paribas Exane	DEUTSCHE BANK (-): Updating estimates ahead of 1Q reporting
4/5/2019	Millennium BCP	Millennium BCP (PT): Europa – Meio Manhã 05/04/2019
4/8/2019	Millennium BCP	Millennium BCP (PT): Europa – Meio Manhã 08/04/2019
4/11/2019	BofA Global Research	Deutsche Bank: Deal or no deal- (No, not Brexit)
4/12/2019	BNP Paribas Exane	INVESTMENT BANKS : Who can win where?
4/15/2019	Barclays	DBK: Bloomberg article on potential CBK synergies - some thoughts
4/17/2019	Pareto Securities AS	Deutsche Bank-Preview Q1 results (26.4.)-04/17/2019
4/19/2019	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
4/22/2019	Credit Suisse	EU Investment Banks: 1Q19 US results difficult for French banks
4/25/2019	Barclays	First Look: DBK calling off discussions with CBK and updating on profits
4/25/2019	BofA Global Research	Deutsche Bank: No deal

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
4/25/2019	BofA Global Research	Deutsche Bank: Not this time
4/25/2019	Credit Suisse	DBKGn.F: Deutsche Bank - DBK ends merger discussion with CBK
4/25/2019	JPMorgan	Deutsche Bank : What does the future hold for DBK post failed CBK merger discussion?
4/25/2019	JPMorgan Econ & FI	Deutsche Bank : Bring On Plan C
4/25/2019	Moody's Investors Services	Deutsche Bank AG: Discontinuation of merger talks with Commerzbank resets the focus to standalone execution and strategic options
4/25/2019	Morgan Stanley	Deutsche Bank: End of merger talks and pre-announcement of Q1 results
4/25/2019	Pareto Securities AS	Deutsche Bank-Discontinuation of CBK merger talks and preliminary Q1 results-04/25/2019
4/25/2019	RBC Capital Markets	DBK - CBK - Much ado about nothing
4/25/2019	UBS Equities	First Read: Deutsche Bank "The end of the beginning – Commerz and Deutsche ..."
4/26/2019	Barclays	First Look: DBK Q119 - waiting for the conf call, actual results in-line
4/26/2019	Barclays	DBK Q119 Conf Call: One +ve, but no strategy change
4/26/2019	BNP Paribas Exane	DEUTSCHE BANK (-): Back to Plan A, or time for Plan C?
4/26/2019	BofA Global Research	Deutsche Bank: Leverage ratio lower on P&L meet
4/26/2019	BofA Global Research	Deutsche Bank: Challenges remain
4/26/2019	Credit Suisse	DBKGn.F: Deutsche Bank - 1Q19: No Plan B amid operating weakness
4/26/2019	JPMorgan	Deutsche Bank : In market merger or not: in need of further cost-cutting to reach RoTE targets
4/26/2019	Kepler Cheuvreux	Merger talks with CMZB discontinued
4/26/2019	Moody's Investors Services	Deutsche Bank AG: Q1 2019: Lower cost base partially insulates Deutsche Bank from market pressures
4/26/2019	Morgan Stanley	Deutsche Bank: 1Q19: In line print, outlook downgrade
4/26/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - very slow progress on improving returns
4/26/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Time for plan C?
4/26/2019	UBS Equities	First Read: Deutsche Bank "Q1 2019 – Back to the original investment case"
4/26/2019	UniCredit Research	Daily Credit Briefing
4/26/2019	ValuEngine, Inc	ValuEngine Rating and Forecast Report for DB
4/28/2019	Commerzbank Corporate Clients	Commerzbank - Deutsche Bank - Back to square one – what's next?
4/28/2019	JPMorgan	Deutsche Bank : Weak revenue environment implies reaching 4%+ RoTE target in 2019E unlikely
4/29/2019	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
4/29/2019	Credit Suisse	Around The Clock: 29 April 2019
4/29/2019	Credit Suisse	Second Edition Summary Europe: 29 April 2019
4/29/2019	Credit Suisse	First Edition Summary Europe: 29 April 2019
4/29/2019	Credit Suisse	DBKGn.F: Deutsche Bank - Downgrade to U/P on difficult fundamentals
4/29/2019	Kepler Cheuvreux	Espresso Note Deutsche Bank Reduce Pressure remains
4/29/2019	Pareto Securities AS	Deutsche Bank - Weak Q1 results – Hold rating confirmed - Quarterly Review
4/29/2019	Societe Generale	Deutsche Bank AG - Equity/Credit review - No Plan B – 'let's wait and see' looks risky
5/1/2019	Barclays	European Investment Banks: UPDATE: 1Q19 Review - Outlook & Profitability
5/1/2019	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
5/1/2019	IHS Technology	IHSMarkit Fintech Research and Consulting Service Brochure
5/6/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
5/7/2019	Morningstar, Inc.	Morningstar DB Updated Star Rating from 07 May 2019

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
5/8/2019	BNP Paribas Exane	INVESTMENT BANKS : Revisiting remuneration
5/8/2019	Morningstar, Inc.	Morningstar DBK Updated Star Rating from 07 May 2019
5/8/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
5/9/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
5/13/2019	BofA Global Research	Deutsche Bank: New CDS contract – a bullish catalyst-
5/13/2019	Corporate Watchdog Reports	Watchdog Report: DB - Red Flags and Warning Signs
5/15/2019	IHS Technology	IHSMarkit Fintech Research and Consulting Service Brochure
5/20/2019	DBRS Morningstar	DBRS Releases Report on Deutsche Bank AG
5/20/2019	UBS Equities	Deutsche Bank "Ongoing headwinds and limited optionality – downgrade to Sell"
5/21/2019	Berenberg	Deutsche Bank (DBK GY) - Going it alone
5/22/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
5/23/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
5/24/2019	BofA Global Research	European Morning Credit: DB may cut back IB, Rallye and subordination
5/24/2019	BuySellSignals Research	Deutsche Bank falls for a second consecutive year, a two-year fall of 61%
5/28/2019	Scope Ratings	Deutsche Bank AG Issuer Rating Report
5/28/2019	Societe Generale	Bank Credit - DB SEN should trade tighter vs CMZB
5/30/2019	IHS Technology	London June 12th Transfromative Tech for the Financial Services Industry Event [Free RSVP]
5/30/2019	IHS Technology	IHSMarkit Fintech Research and Consulting Service Brochure
6/2/2019	JPMorgan	Deutsche Bank : Restructuring in sight: Path to 5%+ ROTE analysis
6/3/2019	HSBC	Deutsche Bank (DBK GR):-Hold: Slow progress makes things worse
6/3/2019	JPMorgan Econ & FI	Weekly Bank Statement : Banks on Bank Holiday
6/3/2019	UBS Equities	Video: DB: Ongoing headwinds and limited optionality – downgrade to Sell
6/4/2019	BofA Global Research	Deutsche Bank: A new plan: at what cost
6/10/2019	BofA Global Research	European Morning Credit: Deutsche Bank downgraded
6/10/2019	JPMorgan Econ & FI	Weekly Bank Statement : TLTRO 3: Trailer Out Now
6/10/2019	Kepler Cheuvreux	Fitch downgrades DB to BBB
6/13/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
6/14/2019	IHS Technology	IHSMarkit Fintech Research and Consulting Service Brochure
6/14/2019	Societe Generale	Deutsche Bank AG (Sell, TP=€5.5) - Rating reiterated - We propose a 'Plan B' that could save DBK from resolution - A. Lim (11p)
6/17/2019	BofA Global Research	Deutsche Bank: New plan starts to formulate-
6/17/2019	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
6/17/2019	JPMorgan Econ & FI	Weekly Bank Statement : Primary Instincts
6/17/2019	Morningstar, Inc.	Morningstar Media Reports Raise Possibility of U.S. Equity Exit at Deutsche Bank
6/17/2019	Morningstar, Inc.	Morningstar Media Reports Raise Possibility of U.S. Equity Exit at Deutsche Bank
6/17/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Creation of bad bank considered according to the press
6/17/2019	Societe Generale	Deutsche Bank AG (Sell, TP=€5.5) - Rating reiterated - Another deleveraging plan that doesn't go far enough - A. Lim (1p)
6/19/2019	UBS Equities	First Read: Deutsche Bank "How much IB shrinkage can Deutsche afford? Do ..."
6/21/2019	Barclays	Deutsche Bank: What happens next? Reiterate UW

Exhibit 5B

Deutsche Bank AG

List of Analyst Reports

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
6/21/2019	Morningstar, Inc.	Morningstar 2019 DFAST Results Better Than Last Year, and We Expect No Capital Return Surprises Next Week
6/21/2019	Morningstar, Inc.	Morningstar 2019 DFAST Results Better Than Last Year, and We Expect No Capital Return Surprises Next Week
6/24/2019	JPMorgan Econ & FI	Weekly Bank Statement : Dove Tale
6/25/2019	Morningstar, Inc.	Morningstar DB Updated Forecasts and Estimates from 25 Jun 2019
6/25/2019	Trefis	Deutsche Bank's Business Model Has Changed Considerably Over The Last Decade, And More Changes Are Underway
6/27/2019	Morningstar, Inc.	Morningstar No Big Surprises for 2019 Stress Tests: Money Center Banks Are the Big Winners With Repurchases
6/27/2019	Morningstar, Inc.	Morningstar No Big Surprises for 2019 Stress Tests: Money Center Banks Are the Big Winners With Repurchases
6/27/2019	RBC Capital Markets	EU Banks and CCAR - DBK no objection but CS conditional no objection to capital plans
6/28/2019	IHS Technology	IHS Markit Fintech Research and Consulting Service Brochure
6/28/2019	Kepler Cheuvreux	360 Report Deutsche Bank Hold Play it like a Swiss, Christian!
6/28/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
7/1/2019	BofA Global Research	Deutsche Bank: Sixth cut is the deepest
7/1/2019	Credit Suisse	DBKGn.F: Deutsche Bank - Are bad banks a good catalyst?
7/1/2019	JPMorgan Econ & FI	Weekly Bank Statement : Cooling Off
7/1/2019	The Business Research Company	Deutsche Bank AG (Deutsche Bank) Company Briefing
7/2/2019	Barclays	DBK: Potential Restructuring - Marketing Feedback and Discussion
7/2/2019	BofA Global Research	European Morning Credit: Deutsche Bank
7/3/2019	Kepler Cheuvreux	Espresso Note Deutsche Bank Hold Play it like a Swiss – Part II
7/3/2019	Societe Generale	Deutsche Bank AG (Sell, TP=€4) - 12m target downgrade - Capital and revenue risks rising; TP reduced to €4.0 - A. Lim (7p)
7/4/2019	UBS Equities	First Read: Deutsche Bank "It's all about revenues in the end – We model ..."
7/5/2019	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
7/7/2019	Barclays	DBK Transformation Plan - First Thoughts
7/7/2019	Credit Suisse	DBKGn.F: Deutsche Bank - Restructuring bold, but execution risk high
7/8/2019	Barclays	DBK: 'Core' revenue growth may depend on CIB stability/growth
7/8/2019	Barclays	Deutsche Bank: Thoughts on Presentation of Strategy 2019
7/8/2019	Berenberg	Deutsche Bank (DBK GY) - Accelerating the retreat
7/8/2019	BofA Global Research	Deutsche Bank: No raise means capital remains an issue
7/8/2019	Credit Suisse	US Large Cap Banks: Implications of Deutsche Bank Restructuring on the US Large Cap Banks
7/8/2019	JPMorgan	Deutsche Bank : Bold restructuring, execution remains key: 10% upside likely in short-term - Remain N
7/8/2019	JPMorgan	Deutsche Bank : New strategy - running the numbers: Remain Neutral
7/8/2019	JPMorgan Econ & FI	Deutsche Bank : The Clock Is Ticking
7/8/2019	JPMorgan Econ & FI	Weekly Bank Statement : What Blackout?
7/8/2019	JPMorgan Econ & FI	Deutsche Bank : Pulling the Levers
7/8/2019	Kepler Cheuvreux	Espresso Note Deutsche Bank Hold Sewing's hour
7/8/2019	Kepler Cheuvreux	Large and ambitious restructuring plan
7/8/2019	Moody's Investors Services	Moody's affirms Deutsche Bank AG's ratings, maintains negative outlook
7/8/2019	Morgan Stanley	Deutsche Bank: Feedback post conference call on restructuring
7/8/2019	Morgan Stanley Fixed Income Research	Deutsche Bank: Strategic Transformational shift?
7/8/2019	Morningstar, Inc.	Morningstar Deutsche Bank Under Review

Exhibit 5B

Deutsche Bank AG

List of Analyst Reports

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
7/8/2019	Morningstar, Inc.	Morningstar Deutsche Bank Under Review
7/8/2019	Morningstar, Inc.	Morningstar DB Updated Star Rating from 08 Jul 2019
7/8/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Decisive on paper but execution is key
7/8/2019	Scope Ratings	Deutsche Bank: not necessarily too little but arguably too late.
7/8/2019	UBS Equities	First Read: Deutsche Bank "Radical restructuring announced – EUR2.- ..."
7/8/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
7/9/2019	BNP Paribas Exane	DEUTSCHE BANK (-): Interpreting the new plan: very tough to achieve
7/9/2019	BofA Global Research	Deutsche Bank: 2022 journey begins
7/9/2019	BofA Global Research	European Banks: Client Conference Call on Deutsche Bank
7/9/2019	Commerzbank Corporate Clients	Capital drought continues
7/9/2019	Credit Suisse	DBKGn.F: Deutsche Bank - Pushing back breakeven
7/9/2019	Moody's Investors Services	Deutsche Bank AG: Update following rating affirmation
7/9/2019	Morningstar, Inc.	Morningstar DBK Updated Star Rating from 08 Jul 2019
7/9/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Focus remains on execution
7/9/2019	UniCredit Research	Daily Credit Briefing
7/10/2019	BofA Global Research	Deutsche Bank: A creditor-friendly new direction
7/10/2019	BofA Global Research	Deutsche Bank: A worthy but difficult journey
7/10/2019	Societe Generale	Deutsche Bank AG - Equity/Credit review - Positive on bonds, not on equity
7/11/2019	Barclays	European Banks: Read-across from Deutsche Bank - Reiterate Underweight BNP, Equal Weight SocGen
7/12/2019	IHS Technology	IHS Markit Fintech Research and Consulting Service Brochure
7/12/2019	UBS Equities	Deutsche Bank "Core revenues are key for the investment view, more than ..."
7/14/2019	JPMorgan Econ & FI	Weekly Bank Statement : Sewing It Together
7/16/2019	Kepler Cheuvreux	Espresso Note Deutsche Bank Hold Too soon for a leap of faith
7/16/2019	Kepler Cheuvreux	S&P confirmed the rating and outlook
7/17/2019	Banco Santander	Santander CIB: Deutsche Bank: Capital Deficit & Revenue Erosion Not Fixed (TP Cut to €4.00 from €8.61)
7/17/2019	Banco Santander	Santander CIB: Santander European Daily, Wednesday, 17 July 2019
7/18/2019	Pareto Securities AS	Deutsche Bank-New strategy with execution risks: Hold, TP EUR 8.00-07/18/2019
7/19/2019	Credit Suisse	EU Investment Banks: 2Q19 another difficult quarter
7/19/2019	Morningstar, Inc.	Morningstar We Are Relaunching Coverage of Deutsche Bank After the Release of Its New Restructuring Plan
7/19/2019	Morningstar, Inc.	Morningstar We Are Relaunching Coverage of Deutsche Bank After the Release of Its New Restructuring Plan
7/19/2019	Morningstar, Inc.	Morningstar We Relaunch Coverage of Deutsche Bank; the New Restructuring Plan Looks Ambitious to Us
7/19/2019	Morningstar, Inc.	Morningstar We Relaunch Coverage of Deutsche Bank; the New Restructuring Plan Looks Ambitious to Us
7/19/2019	Morningstar, Inc.	Morningstar DB Updated Star Rating from 19 Jul 2019
7/19/2019	Trefis	Trefis Report: Deutsche Bank - \$7.04 Trefis Price Estimate
7/20/2019	Morningstar, Inc.	Morningstar DBK Updated Star Rating from 19 Jul 2019
7/20/2019	Trefis	Will Deutsche Bank Successfully Follow Through On Its Biggest Restructuring Plan Till Date?
7/22/2019	JPMorgan Econ & FI	Weekly Bank Statement : Sliding into Summer
7/24/2019	Barclays	First Look: DBK Q219 - Weak CIB revs partly offset by C&O
7/24/2019	BofA Global Research	Deutsche Bank: Small miss as strategic plan gets underway
7/24/2019	BofA Global Research	Deutsche Bank: 2Q hit by restructuring charges

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
7/24/2019	Commerzbank Corporate Clients	Q2 - The rest remains the pain
7/24/2019	Credit Suisse	DBKGn.F: Deutsche Bank - 2Q19: Underlying results disappointing
7/24/2019	JPMorgan	Deutsche Bank : All eyes on restructuring progress and capital
7/24/2019	JPMorgan	Deutsche Bank : "Show me" stock with 3Q the next milestone to measure progress on asset and Cost reductions
7/24/2019	Kepler Cheuvreux	Espresso Note Deutsche Bank Hold Start of the restructuring plan
7/24/2019	Kepler Cheuvreux	Q2 starts to digest restructuring costs
7/24/2019	Moody's Investors Services	Deutsche Bank AG: Q2 2019: Continued revenue weakness in capital markets business subdues underlying profitability
7/24/2019	Morgan Stanley	Deutsche Bank: 2Q19: First Take
7/24/2019	Morningstar, Inc.	Morningstar Deutsche Bank Reports 2Q Loss Driven by Restructuring Charges; FVE Maintained
7/24/2019	Morningstar, Inc.	Morningstar Deutsche Bank Reports 2Q Loss Driven by Restructuring Charges; FVE Maintained
7/24/2019	Pareto Securities AS	Deutsche Bank-Higher than expected Q2 loss due to higher restructuring charges-07/24/2019
7/24/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK Q2 19 Results - Long Road Ahead
7/24/2019	UBS Equities	First Read: Deutsche Bank "Q2 19 results – a challenging quarter as ..."
7/24/2019	ValuEngine, Inc	ValuEngine Rating and Forecast Report for DB
7/25/2019	Commerzbank Corporate Clients	Deutsche Bank: Computing - the source of capital returns
7/25/2019	Credit Suisse	DBKGn.F: Deutsche Bank - Post 2Q19: Still a lot to prove
7/25/2019	Societe Generale	Deutsche Bank AG - Equity/Credit review - Weak core profitability could bring capital adequacy back into focus in 1-2 years
7/25/2019	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
7/26/2019	Barclays	Deutsche Bank: Q219 - Revenue trend key - Reit UW
7/26/2019	BNP Paribas Exane	DEUTSCHE BANK (-): Starting the process
7/26/2019	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
7/26/2019	Kepler Cheuvreux	Espresso Note Deutsche Bank Hold A first step in execution
7/29/2019	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
7/29/2019	Morningstar, Inc.	Morningstar We Are Relaunching Coverage of Deutsche Bank After the Release of Its New Restructuring Plan
7/30/2019	Sadif Analytics Prime	Is Deutsche Bank AG Worth a Higher Bid?
8/7/2019	DBRS Morningstar	DBRS Publishes 2Q19 European Capital Markets Performance More Closely Aligned to US Peers
8/9/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
8/15/2019	BofA Global Research	Deutsche Bank: Capital still the dominant topic
8/15/2019	Commerzbank Corporate Clients	Fiscal game changer?
8/22/2019	Commerzbank Corporate Clients	European banks: Not yet time to buy credit beta
8/23/2019	BuySellSignals Research	Deutsche Bank drops 7% in 2019
9/2/2019	JPMorgan Econ & FI	Weekly Bank Statement : Pressed To Print
9/4/2019	JPMorgan	Deutsche Bank : Cutting estimates on lower NII
9/5/2019	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
9/9/2019	Barclays	DBK: 2019 Conference Feedback
9/9/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
9/10/2019	Morgan Stanley	Deutsche Bank: Model Update: Marking to Strategy
9/10/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
9/12/2019	Societe Generale	Slideshow: Global Investment banks - Can European I-banks be saved?

Exhibit 5B

Deutsche Bank AG

List of Analyst Reports

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
9/18/2019	Trefis	Understanding The Impact Of Deutsche Bank's Ill-Fated Postbank Acquisition
9/23/2019	DBRS Morningstar	DBRS: Overheating in German Commercial Real Estate– Risks Manageable for Banks
9/24/2019	Morningstar, Inc.	Morningstar DB Updated Star Rating from 25 Sep 2019
9/25/2019	Commerzbank Corporate Clients	Banks: Few cheers for new tiers
9/25/2019	Commerzbank Corporate Clients	Conference Feedback: Progress on downsizing CRU in Q3
9/26/2019	Commerzbank Corporate Clients	How relevant is QE2?
9/26/2019	DBRS Morningstar	DBRS: Increasing Risks for Small and Medium-Sized German Banks despite Stress Tests Pass
9/27/2019	Moody's Investors Services	Moody's withdraws some of Deutsche Bank AG's junior senior unsecured ratings for business reasons
9/30/2019	Credit Suisse	European investment banks: Modest downgrades for a sluggish Q3
10/4/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
10/10/2019	Corporate Watchdog Reports	Watchdog Report: DB - Now with EU KAMS - Key Audit Matters
10/16/2019	Barclays	Deutsche Bank: New divisional data; new model, same Underweight
10/17/2019	Moody's Investors Services	Deutsche Bank Trust Company Americas: Update to credit analysis
10/17/2019	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
10/22/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
10/24/2019	JPMorgan	Deutsche Bank : Model Update
10/28/2019	Commerzbank Corporate Clients	Q3 due 30 October: Focus on CRU
10/28/2019	Credit Suisse	DBKGn.F: Deutsche Bank - Pre Q3: Restating for new disclosures
10/28/2019	UBS Equities	Deutsche Bank "New divisional estimates and reiterating key thoughts and ..."
10/28/2019	ValuEngine, Inc	ValuEngine Rating and Forecast Report for DB
10/29/2019	Banco Santander	Santander CIB: Deutsche Bank: 3Q19E Preview
10/30/2019	Barclays	First Look: DBK Q319 - Weaker overall, core a bit better on IB fees
10/30/2019	Barclays	Deutsche Bank: Q319 Results - Revenues Uninspiring
10/30/2019	BNP Paribas Exane	DEUTSCHE BANK (-): Beginning the restructuring
10/30/2019	BofA Global Research	Deutsche Bank: Capital still dominates
10/30/2019	Commerzbank Corporate Clients	Q3: Restructuring well on track
10/30/2019	Credit Suisse	DBKGn.F: Deutsche Bank - Post Q3: Little to generate optimism
10/30/2019	Credit Suisse	DBKGn.F: Deutsche Bank - 3Q19 first look: Low adjusted PBT
10/30/2019	JPMorgan	Deutsche Bank : Disappointing 3Q due to negative revenues in non-core leading to potentially material EPS cuts
10/30/2019	JPMorgan	Deutsche Bank : Restructuring on track, but non-core unit leading to material EPS cuts up to 2022E
10/30/2019	Kepler Cheuvreux	Ongoing transformation
10/30/2019	Moody's Investors Services	Deutsche Bank AG: Q3 2019: Continued execution in a challenging market environment
10/30/2019	Morgan Stanley	Deutsche Bank: 3Q19: First Take
10/30/2019	Morningstar, Inc.	Morningstar Deutsche Bank Results Remain Choppy
10/30/2019	Morningstar, Inc.	Morningstar Deutsche Bank Results Remain Choppy
10/30/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK Q3 '19 Results - Progress on deleveraging but earnings remain challenged
10/30/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - A long road ahead
10/30/2019	UBS Equities	First Read: Deutsche Bank "Q3 2019 review – Low visibility persists" (Neutral)
10/30/2019	UBS Equities	First Read: Deutsche Bank "Q3 2019 first take – We expect a rather neutral ..."
10/31/2019	DBRS Morningstar	DB 3Q19 Results: Progress on Restructuring; Weakness in Fixed Income

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
10/31/2019	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
10/31/2019	Societe Generale	Deutsche Bank AG - Equity/Credit review - We strongly reiterate our stance – Credit positive, Equity (very) negative
10/31/2019	Trefis	Trefis Report: Deutsche Bank - \$6.73 Trefis Price Estimate
11/1/2019	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
11/1/2019	Kepler Cheuvreux	Espresso Note Deutsche Bank Hold Not a walk in the park
11/4/2019	DBRS Morningstar	European Capital Markets Revenues Progressing, but Weaknesses Remain
11/4/2019	Scope Ratings	Deutsche Bank: some progress but victory not assured
11/5/2019	Berenberg	Deutsche Bank (DBK GY) - Off to an inauspicious start
11/5/2019	BofA Global Research	Deutsche Bank: 3Q was OK
11/5/2019	BofA Global Research	Deutsche Bank: P&L miss as DBK starts long journey
11/5/2019	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
11/5/2019	Morningstar, Inc.	Morningstar European Banks' Dividend Yields Are Juicy, But Are They Safe?
11/5/2019	Morningstar, Inc.	Morningstar European Banks' Dividend Yields Are Juicy, But Are They Safe?
11/6/2019	BuySellSignals Research	Deutsche Bank strengthens 1% in 2019, but lagging Bank sector
11/8/2019	Edison Investment Research	Deutsche Börse - On track to meet strategic targets
11/11/2019	JPMorgan Econ & FI	From Fixed Income To Fixed Loss : 2020 European Banks Outlook
11/11/2019	Morgan Stanley	Deutsche Bank: Tough restructuring task ahead
11/14/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
11/26/2019	Societe Generale	Deutsche Bank AG (Sell, TP=€4) - EPS downgrade - New plan, same problems. TP of €4.0 and Sell rating maintained - A. Lim (18p)
11/26/2019	UniCredit Research	Bank & Insurance Watch - Spanish MREL letters, Deutsche Bank lower G-SIB buffer & Fitch criteria update (November 2019)
11/28/2019	Kepler Cheuvreux	Got rid of USD50bn unwanted assets
11/29/2019	BuySellSignals Research	Deutsche Bank crashes 71% in 5 years
12/2/2019	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
12/5/2019	Credit Suisse	DBKGn.F: Deutsche Bank - Investor Day Preview: No major changes
12/5/2019	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
12/7/2019	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
12/10/2019	Barclays	DBK: 2019 Investor Event - Initial thoughts on the slides
12/10/2019	BofA Global Research	European Morning Credit: Deutsche Bank's capital requirement
12/10/2019	Credit Suisse	DBKGn.F: Deutsche Bank - 2019 Investor Day management comments
12/10/2019	Credit Suisse	DBKGn.F: Deutsche Bank - 2019 investor day headlines
12/10/2019	JPMorgan	Deutsche Bank : Targets reiterated, lower CET1 requirement slightly helpful but Basel 4 guidance worse than expected
12/10/2019	Moody's Investors Services	Deutsche Bank AG: Continued strong execution and client retention will help support DB's credit profile
12/10/2019	Morgan Stanley	Deutsche Bank: Investor Deep dive: work in progress
12/10/2019	UBS Equities	First Read: Deutsche Bank "Investor Update - Unchanged targets, ..."
12/11/2019	BofA Global Research	Deutsche Bank: Investor Deep-Dive feedback
12/11/2019	Commerzbank Corporate Clients	CMD: This time is different...
12/11/2019	Commerzbank Corporate Clients	Why iBoxx errs on Deutsche Bank
12/11/2019	Commerzbank Corporate Clients	Warum iBoxx bei der Deutschen Bank falsch liegt

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
12/11/2019	JPMorgan	Deutsche Bank : Deep dive details welcome: it is all about execution
12/11/2019	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Light at the end of the tunnel?
12/11/2019	Societe Generale	Deutsche Bank AG - Equity/Credit review - Sell Equity, Buy Credit – Views unchanged post “Deep dive”
12/12/2019	Kepler Cheuvreux	Moody’s comments post CMD
12/12/2019	Trefis	Deutsche Bank vs. UBS: Which European Bank Has A Larger Advisory & Underwriting Business?
12/16/2019	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
12/17/2019	BuySellSignals Research	Deutsche Bank falls for a second consecutive year
12/17/2019	Kepler Cheuvreux	S&P rating confirmed
12/17/2019	Trefis	How Does Deutsche Bank’s Asset Management Business Compare With Swiss Peers UBS and Credit Suisse?
12/18/2019	Kepler Cheuvreux	Espresso Note Deutsche Bank Hold Good for sentiment
12/18/2019	Pareto Securities AS	Deutsche Bank-Model Update: Hold, TP EUR 8.0-12/18/2019
12/20/2019	Moody's Investors Services	Deutsche Bank AG: Update to credit analysis
12/30/2019	BuySellSignals Research	Deutsche Bank increases 1.0% in FY 2019
1/3/2020	BuySellSignals Research	Deutsche Bank lifts 12% in past quarter
1/8/2020	Societe Generale	Global Investment Banks - The case for buying banks (relatively)
1/9/2020	Morningstar, Inc.	Morningstar DB Updated Star Rating from 08 Jan 2020
1/9/2020	Morningstar, Inc.	Morningstar DBK Updated Star Rating from 08 Jan 2020
1/9/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
1/13/2020	Morgan Stanley	Deutsche Bank: Model Update: Marking to Restructuring charges, CRU losses + higher FICC in 4Q
1/17/2020	Barclays	European Investment Banks: Q419 - What to watch for?
1/17/2020	Credit Suisse	EU Investment Banks: 4Q19 US read-across: Strong beat in FICC
1/20/2020	Societe Generale	Deutsche Bank AG - \$6.25% AT1 call April 2020 – No longer compelling - Credit Research
1/24/2020	Commerzbank Corporate Clients	Q4 due 30 January: Revenues in Core Bank to stabilise
1/27/2020	Banco Santander	Santander CIB: German Banks: Trends into 4Q19E & Previews
1/27/2020	UBS Equities	Deutsche Bank "Neutral reiterated into Q4 results" (Neutral) Brupbacher
1/28/2020	The Business Research Company	Deutsche Bank AG (Deutsche Bank) Company Briefing
1/28/2020	Warburg Research GmbH	Q4 preview: revenue recovery at FIC in Q4 but significant FY loss
1/30/2020	Barclays	First Look: DB Q419 Results - Mixed quality, capital better
1/30/2020	BofA Global Research	Deutsche Bank: P&L in line in messy quarter
1/30/2020	BofA Global Research	Deutsche Bank: 4Q mixed but some good parts
1/30/2020	Commerzbank Corporate Clients	Q4: Still a long way to go...
1/30/2020	Credit Suisse	DBKGn.F: Deutsche Bank - Q4: Capital beat but operating miss
1/30/2020	JPMorgan	Deutsche Bank : Delivering on restructuring but low profitability remains an overhang
1/30/2020	Kepler Cheuvreux	Espresso Note Deutsche Bank Hold Q4 first reaction: High capital ratios, rebound in FICC S&T
1/30/2020	Kepler Cheuvreux	Q4 results, solid capital ratios
1/30/2020	Moody's Investors Services	Deutsche Bank AG: Q4 2019: Persistent execution of strategic revamp gradually moves DB into calmer waters
1/30/2020	Morgan Stanley	Deutsche Bank: 4Q19: First Take
1/30/2020	Morningstar, Inc.	Morningstar Deutsche Bank Takes a Bath in 2019 While Revenue Generation Remains the Focal Point
1/30/2020	Morningstar, Inc.	Morningstar Deutsche Bank Takes a Bath in 2019 While Revenue Generation Remains the Focal Point
1/30/2020	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Little earnings visibility but further progress on capital

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
1/30/2020	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Larger margin for errors
1/30/2020	Trefis	Why Deutsche Bank's 2019 Losses Are Likely To Be Lower Than Market Expectations
1/30/2020	UBS Equities	First Read: Deutsche Bank "Q4 2019 – First take: Revenue beat, underlying ..."
1/30/2020	ValuEngine, Inc	ValuEngine Rating and Forecast Report for DB
1/31/2020	Barclays	Deutsche Bank: Q419 - Detaching from fundamentals
1/31/2020	BNP Paribas Exane	DEUTSCHE BANK (-): Business pressures but confident commentary
1/31/2020	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
1/31/2020	Credit Suisse	DBKGn.F: Deutsche Bank - Post Q4: Profit timeline further eroded
1/31/2020	JPMorgan	Deutsche Bank : Model Update
1/31/2020	Societe Generale	Deutsche Bank AG - Equity/Credit review - Equity upgraded to Hold; bullish on credit
1/31/2020	Trefis	Trefis Report: Deutsche Bank - \$7.85 Trefis Price Estimate
1/31/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
2/3/2020	BofA Global Research	Deutsche Bank: Capital progress shifts focus to revenues
2/3/2020	BuySellSignals Research	Deutsche Bank is good value by Price/NTA despite 7% price rise
2/3/2020	Kepler Cheuvreux	Espresso Note Deutsche Bank Hold One hurdle at a time
2/4/2020	Acquisdata	Deutsche Bank AG (NYSE- DB, ETR- DBK)
2/4/2020	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
2/7/2020	Berenberg	Deutsche Bank (DBK GY) - Core profitability is still weak
2/7/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
2/11/2020	JPMorgan Econ & FI	Deutsche Bank : Adding Tier 1
2/11/2020	Kepler Cheuvreux	New AT1 to be issued
2/11/2020	Societe Generale	Deutsche Bank AG - AT1 new issue, but \$6.25% call still unclear - Credit Research
2/14/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
2/25/2020	Pareto Securities AS	Deutsche Bank-Model Update-02/25/2020
3/2/2020	JPMorgan Econ & FI	Weekly Bank Statement : Short Stories
3/4/2020	JPMorgan	German Banks : Model Updates
3/6/2020	BuySellSignals Research	Deutsche Bank increases 4% in past quarter
3/6/2020	Morningstar, Inc.	Morningstar DB Updated Star Rating from 05 Mar 2020
3/7/2020	Morningstar, Inc.	Morningstar DBK Updated Star Rating from 06 Mar 2020
3/11/2020	BofA Global Research	Deutsche Bank: DB will not redeem the 6.25% AT1
3/11/2020	Morningstar, Inc.	Morningstar Natixis, Credit Agricole, and ING Have Greatest Exposure to Oil and Gas Industry
3/11/2020	Morningstar, Inc.	Morningstar Natixis, Credit Agricole, and ING Have Greatest Exposure to Oil and Gas Industry
3/11/2020	Societe Generale	Global I-Banks - Revisiting our bearish thesis on credit
3/11/2020	UniCredit Research	Sector Flash - Banks: Impact of coronavirus outbreak on European banks
3/12/2020	Kepler Cheuvreux	USD AT1 not called
3/13/2020	Commerzbank Corporate Clients	No gift from the ECB
3/14/2020	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
3/17/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
3/18/2020	Morgan Stanley	Deutsche Bank: MS Financials Conference Feedback
3/20/2020	Barclays	DB: 2019 Annual Reports Published - Initial Observations

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
3/20/2020	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
3/26/2020	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
3/26/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
4/1/2020	Morningstar, Inc.	Morningstar Suspension of Eurozone Banks' Dividends Will Boost Common Equity Tier 1 Ratio by 0.6%
4/1/2020	Morningstar, Inc.	Morningstar Suspension of Eurozone Banks' Dividends Will Boost Common Equity Tier 1 Ratio by 0.6%
4/3/2020	BofA Global Research	Deutsche Bank: It's a revenue thing
4/7/2020	UBS Equities	Deutsche Bank "We expect more revenue pressure and risk costs going up"
4/9/2020	BuySellSignals Research	Deutsche Bank falls for a third consecutive year, a three-year fall of 59%
4/9/2020	Credit Suisse	EU Investment & Swiss Banks: Lowering targets for COVID-19
4/14/2020	Barclays	European IBs: Focus on capital and balance sheet risk - downgrade CS to UW
4/14/2020	Societe Generale	Global Investment Banks - Buy Global I-bank stocks thematically for the next bull run
4/14/2020	Societe Generale	Deutsche Bank AG (Hold, TP=€6.5) - 12m target downgrade - Cheap, but COVID-19 risks to credit quality are a concern - A. Lim (7p)
4/15/2020	Commerzbank Corporate Clients	Q1 due 29 April: Good or bad volatility?
4/16/2020	Corporate Watchdog Reports	Watchdog Report: DB - Now with Critical / Key Audit Matters
4/16/2020	Societe Generale	Slideshow: Buy Global I-bank stocks thematically for the next bull run
4/17/2020	Credit Suisse	EU Investment Banks: US 1Q20 read-through encouraging
4/17/2020	Morningstar, Inc.	Morningstar DB Updated Star Rating from 17 Apr 2020
4/18/2020	Morningstar, Inc.	Morningstar DBK Updated Star Rating from 17 Apr 2020
4/22/2020	HSBC	Deutsche Bank (DBK GR):-Maintain Hold: Time is the enemy
4/22/2020	Morningstar, Inc.	Morningstar Updated European Banks' Forecasts to Incorporate Impact of COVID-19
4/22/2020	Morningstar, Inc.	Morningstar Updated European Banks' Forecasts to Incorporate Impact of COVID-19
4/22/2020	Trefis	Trefis Report: Deutsche Bank - \$6.81 Trefis Price Estimate
4/22/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
4/24/2020	ValuEngine, Inc	ValuEngine Rating and Forecast Report for DB
4/27/2020	Barclays	DBK: Q120 Preannouncement - better earnings, weaker capital
4/27/2020	BofA Global Research	Deutsche Bank: Preannounced 1Q, new capital goals
4/27/2020	BofA Global Research	Deutsche Bank: Better 1Q, capital guidance adjusted
4/27/2020	Commerzbank Corporate Clients	Q1 prelims: Pre-tax profit above expectations
4/27/2020	Credit Suisse	DBKGn.F: Deutsche Bank - Preannounces beat but lower CET1 guidance
4/27/2020	JPMorgan	Deutsche Bank : Strong 1Q driven by revenues - devil is in the details with full results on 29th April
4/27/2020	Kepler Cheuvreux	Q1 2020 results preannounced
4/27/2020	Morgan Stanley	Deutsche Bank: Deutsche Bank pre-reports key 1Q20 items, adjusts capital guidance for 2020
4/27/2020	Pareto Securities AS	Deutsche Bank - Preliminary Q1 results better than expected
4/27/2020	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Q1 PBT beat, updated capital targets pre announced
4/27/2020	UBS Equities	First Read: Deutsche Bank "Q1 2020 pre-announcement" (Neutral) Brupbacher
4/28/2020	Banco Santander	Santander CIB: German Banks: Trends Going into 1Q20
4/28/2020	Banco Santander	Santander CIB: Santander European Daily, Tuesday, 28 April 2020
4/28/2020	Morningstar, Inc.	Morningstar Deutsche Bank Offers Early Glimpse of Decent First-Quarter Results
4/28/2020	Morningstar, Inc.	Morningstar Deutsche Bank Offers Early Glimpse of Decent First-Quarter Results

Exhibit 5B

Deutsche Bank AG

List of Analyst Reports

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
4/28/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
4/29/2020	Barclays	Deutsche Bank: Q120 First Take: Not as good as preannounced but still better than what we had before
4/29/2020	BofA Global Research	Deutsche Bank: Hard at work, but hard work
4/29/2020	Credit Suisse	DBKGn.F: Deutsche Bank - 1Q20 in line with preannouncement
4/29/2020	JPMorgan	Deutsche Bank : Going in the right direction – but questioning sustainability of FICC and COVID-19 provisions
4/29/2020	JPMorgan	Deutsche Bank : Model Update
4/29/2020	Kepler Cheuvreux	Espresso Note Deutsche Bank Hold Q1: initial reaction
4/29/2020	Millennium BCP	Millennium BCP (PT): Europa – Meio Manhã 29/04/2020
4/29/2020	Moody's Investors Services	Deutsche Bank AG: Restructuring progress benefits DB's credit profile, despite coronavirus reserve builds
4/29/2020	Morgan Stanley	Deutsche Bank: 1Q20: Stronger revenues, lower provisions
4/29/2020	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Q1 beat mainly driven by IB
4/29/2020	UBS Equities	First Read: Deutsche Bank "Detailed Q1 2020 results: Similar conclusions as ..."
4/30/2020	BNP Paribas Exane	DEUTSCHE BANK (-): Debating credit and capital outlooks
4/30/2020	Commerzbank Corporate Clients	Q1: All efforts on revenue growth
4/30/2020	Credit Suisse	DBKGn.F: Deutsche Bank - Post 1Q20: Still better value elsewhere
4/30/2020	Morningstar, Inc.	Morningstar Fixed Income and Currencies Trading a Boon for Deutsche in Q1; Fair Value Estimate Maintained
4/30/2020	Morningstar, Inc.	Morningstar Fixed Income and Currencies Trading a Boon for Deutsche in Q1; Fair Value Estimate Maintained
4/30/2020	Societe Generale	Deutsche Bank AG - Equity/Credit review - Limited upside in equity; positive on Credit
4/30/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
5/1/2020	Barclays	Deutsche Bank: Q120 Results - asset quality and capital in focus
5/1/2020	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Good enough, for now
5/1/2020	Trefis	Trefis Report: Deutsche Bank - \$6.43 Trefis Price Estimate
5/2/2020	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
5/4/2020	BNP Paribas Exane	INVESTMENT BANKS : Assessing balance sheets after 1Q reporting
5/4/2020	Pareto Securities AS	Deutsche Bank-Model Update-05/04/2020
5/6/2020	BuySellSignals Research	Deutsche Bank decreases 8% in 2020
5/7/2020	Berenberg	Deutsche Bank (DBK GY) - Not out of the woods yet
5/8/2020	Moody's Investors Services	Deutsche Bank AG: Regular update - Restructuring progress mitigates coronavirus-related earnings strain
5/8/2020	UBS Equities	Deutsche Bank "Beyond the inflection point in a volatile world" (Neutral)
5/8/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
5/11/2020	Morningstar, Inc.	Morningstar Deutsche Bank: Restructuring During a Pandemic
5/11/2020	Morningstar, Inc.	Morningstar Deutsche Bank: Restructuring During a Pandemic
5/11/2020	Societe Generale	Banks - Deutsche Bank NPS tender offer – show of strength? - Credit Research
5/12/2020	BofA Global Research	European Morning Credit: Deutsche Bank, Allied Irish Banks, Bank of Ireland, Allianz, Iliad, Vodafone and Engie
5/12/2020	Kepler Cheuvreux	Taking advantage of the new rules
5/13/2020	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
5/21/2020	Kepler Cheuvreux	Tender offer result
5/26/2020	BuySellSignals Research	Deutsche Bank GDR falls 15% in past quarter; Institutional Ownership steady
5/29/2020	Kepler Cheuvreux	Rating watch removed at Fitch level
5/29/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
6/10/2020	BofA Global Research	Deutsche Bank: Lower impairments, richly valued
6/11/2020	Kepler Cheuvreux	Deutsche Bank Hold DB to create International Private Bank
6/11/2020	Kepler Cheuvreux	International Private Bank created
6/11/2020	Morningstar, Inc.	Morningstar DB Updated Star Rating from 11 Jun 2020
6/12/2020	Morningstar, Inc.	Morningstar DBK Updated Star Rating from 11 Jun 2020
6/16/2020	Barclays	European IBs: Where do we go from here?
6/16/2020	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft
6/16/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
6/18/2020	Barclays	DBK: Risk 'deep dive' and capital guidance
6/18/2020	Credit Suisse	DBK.Gn.F: Deutsche Bank - Deep dive on risk
6/18/2020	JPMorgan	Deutsche Bank : Risk deep dive positive with helpful details but low RoTE generation justifies valuation discount
6/18/2020	Moody's Investors Services	Deutsche Bank AG: Restructuring progress supports DB's asset performance
6/19/2020	Commerzbank Corporate Clients	A deep dive into the loan book
6/19/2020	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
6/19/2020	Societe Generale	Deutsche Bank AG (Hold, TP=€7) - Analyst meeting - Reassuring 'Deep Dive' presentation on credit quality - A. Lim (2p)
6/22/2020	Kepler Cheuvreux	Deutsche Bank Reduce Too little margin
6/25/2020	BNP Paribas Exane	INVESTMENT BANKS : Reviewing Remuneration
6/26/2020	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
6/26/2020	Morningstar, Inc.	Morningstar European Banks' U.S. Divisions Fare Well in Fed's 2020 Stress Tests
6/26/2020	Morningstar, Inc.	Morningstar European Banks' U.S. Divisions Fare Well in Fed's 2020 Stress Tests
6/30/2020	BofA Global Research	Deutsche Bank: IB moderating 2Q20 losses
6/30/2020	BuySellSignals Research	Deutsche Bank ADR surges 46% in Q2/2020
6/30/2020	Kepler Cheuvreux	Deutsche Bank Reduce Pre-close sell-side briefing feedback
7/6/2020	Morningstar, Inc.	Morningstar Impact of Coronavirus on Credit Quality, Capital Adequacy, and Profitability Is Manageable
7/6/2020	Morningstar, Inc.	Morningstar Impact of Coronavirus on Credit Quality, Capital Adequacy, and Profitability Is Manageable
7/6/2020	Morningstar, Inc.	Morningstar DB Updated Star Rating from 06 Jul 2020
7/9/2020	BNP Paribas Exane	INVESTMENT BANKS : Raising estimates ahead of 2Q reporting
7/9/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
7/15/2020	Commerzbank Corporate Clients	Q2 due 29 July: Revenue growth path in core bank to continue
7/17/2020	Credit Suisse	EU investment banks: US read-through positive for Q2 earnings
7/20/2020	Barclays	European IBs: Increasing Q220 Trading Estimates
7/20/2020	BuySellSignals Research	Deutsche Bank lifts 27% in past year
7/21/2020	Barclays	DBK Q220 Capital and Earnings Pre-announcement
7/21/2020	Morgan Stanley	Deutsche Bank: Pre-announced capital beat, CET1 at 13.3%
7/21/2020	UBS Equities	First Read: Deutsche Bank "Q2 2020 pre-announcement: Strong capital, softer ..."
7/22/2020	UniCredit Research	Daily Credit Briefing
7/22/2020	ValuEngine, Inc	ValuEngine Rating and Forecast Report for DB
7/23/2020	BofA Global Research	Deutsche Bank: Mitigating circumstances
7/27/2020	Kepler Cheuvreux	Banks & Asset Managers Least preferred list: Banco BPM out, Deutsche Bank in
7/28/2020	Warburg Research GmbH	Vorschau: Q2-Ergebnis dürfte Konsens leicht übertreffen

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
7/28/2020	Warburg Research GmbH	Preview: Q2 result expected to slightly exceed consensus
7/29/2020	Barclays	DBK Q220 Results: Mixed trends
7/29/2020	Barclays	Deutsche Bank: Q220 results - franchise challenges
7/29/2020	BNP Paribas Exane	DEUTSCHE BANK (-): Stable capital, but unclear earnings power
7/29/2020	BofA Global Research	Deutsche Bank: 2Q20 a little better
7/29/2020	BofA Global Research	Deutsche Bank: 2Q was decent
7/29/2020	Commerzbank Corporate Clients	Q2: More light than shadow
7/29/2020	Credit Suisse	DBKGn.F: Deutsche Bank - Management comments on the 2Q20 call
7/29/2020	Credit Suisse	DBKGn.F: Deutsche Bank - 2Q20 first look: In line with preannouncement
7/29/2020	JPMorgan	Deutsche Bank : Results ahead of expectations, but with 2H revenue normalisation expected: 4% L-T RoTE unchanged
7/29/2020	JPMorgan	Deutsche Bank : Model Update
7/29/2020	Kepler Cheuvreux	Deutsche Bank Reduce High but low quality beat
7/29/2020	Kepler Cheuvreux	Above expectations
7/29/2020	Moody's Investors Services	Deutsche Bank AG: Q2 2020: Regained strengths in core businesses help offset coronavirus disruption
7/29/2020	Morgan Stanley	Deutsche Bank: 2Q20: Strong capital print, PBT better
7/29/2020	Morgan Stanley	Deutsche Bank: Restructuring on track - another quarter under the belt
7/29/2020	Morningstar, Inc.	Morningstar Deutsche Bank: We Increase Our Fair Value Estimate on More Positive Revenue Outlook
7/29/2020	Morningstar, Inc.	Morningstar Deutsche Bank: We Increase Our Fair Value Estimate on More Positive Revenue Outlook
7/29/2020	Morningstar, Inc.	Morningstar Investment Bank Shines in Second Quarter, a Positive Sign for Deutsche Bank
7/29/2020	Morningstar, Inc.	Morningstar Investment Bank Shines in Second Quarter, a Positive Sign for Deutsche Bank
7/29/2020	Morningstar, Inc.	Morningstar DB Updated Star Rating from 29 Jul 2020
7/29/2020	Pareto Securities AS	Deutsche Bank-Q2 results slightly better than expected-07/29/2020
7/29/2020	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - DBK - Beat on a number of lines
7/29/2020	RBC Capital Markets	Deutsche Bank Aktiengesellschaft - Off to a new quarter
7/29/2020	The Business Research Company	Deutsche Bank AG (Deutsche Bank) Company Briefing
7/29/2020	UBS Equities	First Read: Deutsche Bank "Q2 2020: No additional major surprises after ..."
7/30/2020	Credit Suisse	DBKGn.F: Deutsche Bank - Post 2Q20: Still little reason to raise revenues
7/30/2020	RBC Capital Markets	UK & European Research at a Glance - July 30, 2020
7/30/2020	RBC Capital Markets	Research at a Glance - [U.S.] Jul 30,2020
7/30/2020	Societe Generale	Deutsche Bank AG - Equity/Credit review - Nothing has really changed – Negative on equity, positive on credit
7/30/2020	UBS Equities	Deutsche Bank "Q2 2020: Narrowing the losses but still a long way to go to ..."
7/30/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
7/31/2020	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
7/31/2020	Trefis	Trefis Report: Deutsche Bank - \$7.85 Trefis Price Estimate
8/1/2020	CFRA Equity Research	Deutsche Bank Aktiengesellschaft
8/3/2020	Kepler Cheuvreux	Deutsche Bank Reduce The almighty IB?
8/4/2020	Acquisdata	Deutsche Bank
8/4/2020	Acquisdata	Deutsche Bank AG
8/4/2020	Berenberg	Deutsche Bank (DBK GY) - Buoyancy likely to prove short lived
8/4/2020	Societe Generale	US Banks - From strength to strength – Increasing target prices for MS and GS

Exhibit 5B**Deutsche Bank AG****List of Analyst Reports**

Source: Refinitiv Eikon, Bloomberg

Date	Contributor	Title
8/7/2020	Moody's Investors Services	Deutsche Bank Trust Company Americas: Update to credit analysis
8/18/2020	Acquisdata	Deutsche Bank AG
8/27/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
8/28/2020	SSIF Tradeville	Rezultate T2 2020 - Deutsche Bank AG
8/31/2020	BuySellSignals Research	Deutsche Bank adds 6.6% in past quarter
9/1/2020	Sadif Analytics Prime	Rating Update for Deutsche Bank AG
9/3/2020	BNP Paribas Exane	INVESTMENT BANKS : The beat goes on
9/9/2020	Kepler Cheuvreux	Deutsche Bank Reduce The Italian option with Banco BPM?
9/17/2020	BofA Global Research	Deutsche Bank: Better IB in Q3
9/18/2020	RBC Capital Markets	UBS - Watch this space
9/22/2020	Corporate Watchdog Reports	Watchdog Report: DB - Now with Critical / Key Audit Matters
9/22/2020	GlobalData	Deutsche Bank AG (DBK) - Financial and Strategic SWOT Analysis Review
9/22/2020	JPMorgan	Deutsche Bank : Upgrading 2020 estimates to reflect stronger trading
9/22/2020	UBS Equities	First Read: Deutsche Bank "Reassuring Q3 FICC revenue guidance above ..."
9/23/2020	Morgan Stanley	Deutsche Bank: Risk Reward Update
9/24/2020	Zacks Equity Research	Deutsche Bank Aktiengesellschaft(DB) Zacks Company Report
9/25/2020	Wright Reports	Wright Investors Service Comprehensive Report for Deutsche Bank Aktiengesellschaft

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

4/27/2017	First-Quarter 2017 Earnings Results				
Firm	Price Target as of 4/26/2017	Price Target as of 5/2/2017	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$13.33	\$14.03	5.25%	sell	sell
Banco Sabadell	\$17.30	\$17.30	0.00%	sell	sell
Bankhaus Lampe	\$22.46	\$22.90	1.96%	buy	buy
Bankhaus Metzler	\$14.05	\$14.05	0.00%	sell	sell
Barclays	\$18.27	\$18.49	1.20%	equalweight	equalweight
Berenberg	\$11.46	\$11.68	1.92%	sell	sell
Citi	\$15.66	\$15.55	-0.70%	sell	sell
Commerzbank	\$16.04	\$16.31	1.68%	reduce	reduce
Credit Suisse				not rated	not rated
Day by Day	\$21.70	\$21.70	0.00%	buy	buy
DZ Bank AG Research	\$15.35	\$15.44	0.59%	sell	sell
Equinet Bank AG	\$20.78	\$20.71	-0.34%	buy	buy
Equita SIM	\$24.06	\$24.06	0.00%	hold	hold
Goldman Sachs	\$17.30	\$17.30	0.00%	neutral/neutral	neutral/neutral
Grupo Santander	\$14.51	\$14.51	0.00%	underweight	underweight
Hamburger Sparkasse				neutral	neutral
Hammer Partners	\$18.39	\$18.39	0.00%	neutral	neutral
HSBC	\$17.38	\$17.38	0.00%	hold	hold
Independent Research GmbH	\$20.60	\$21.75	5.58%	buy	buy
ISS-EVA				underweight	underweight
JP Morgan	\$19.52	\$19.62	0.51%	neutral	neutral
Keefe Bruyette & Woods	\$21.42	\$21.81	1.82%	outperform	outperform
Kepler Cheuvreux	\$18.97	\$19.03	0.32%	buy	buy
M.M.Warburg Co.	\$19.79	\$19.79	0.00%	hold	hold
Macquarie	\$18.71	\$20.71	10.69%	outperform	outperform
Mainfirst	\$17.14	\$17.40	1.52%	neutral	neutral
Mediobanca	\$14.75	\$14.83	0.54%	underperform	underperform
Morgan Stanley	\$18.55	\$18.16	-2.10%	Equalwt/In-Line	Equalwt/In-Line
Morningstar				hold	hold
Natixis	\$11.93	\$12.17	2.01%	reduce	reduce
NORD/LB	\$14.85	\$15.05	1.35%	sell	sell
Oddo BHF	\$15.47	\$15.47	0.00%	neutral	neutral
RBC Capital	\$15.04	\$15.26	1.46%	sector perform	sector perform
Redburn				sell	sell
Societe Generale	\$11.10	\$11.19	0.81%	sell	sell
Wise-owl.com	\$22.23	\$22.23	0.00%	buy	buy
Total	\$17.36	\$17.56	1.14%		

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

7/27/2017	Second-Quarter 2017 Earnings Results				
Firm	Price Target as of 7/26/2017	Price Target as of 8/1/2017	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$15.59	\$15.86	1.73%	sell	sell
Banco Sabadell	\$17.30	\$17.30	0.00%	sell	sell
Bankhaus Lampe	\$24.50	\$24.49	-0.04%	buy	buy
Bankhaus Metzler	\$16.30	\$16.30	0.00%	sell	sell
Berenberg	\$11.68	\$11.68	0.00%	sell	sell
Citi	\$13.96	\$14.00	0.29%	sell	sell
Commerzbank	\$17.45	\$17.50	0.29%	reduce	reduce
Credit Suisse	\$17.60	\$17.61	0.06%	underperform	underperform
Day by Day				hold	hold
DZ Bank AG Research	\$20.58	\$21.58	4.86%	buy	buy
Equinet Bank AG	\$20.71	\$20.71	0.00%	buy	buy
Equita SIM	\$24.06	\$24.06	0.00%	hold	hold
Goldman Sachs	\$17.93	\$17.93	0.00%	neutral/neutral	neutral/neutral
Grupo Santander	\$19.25	\$19.25	0.00%	underweight	underweight
Hamburger Sparkasse				neutral	neutral
Hammer Partners	\$18.61	\$18.55	-0.32%	neutral	neutral
HSBC	\$21.64	\$21.64	0.00%	hold	hold
Independent Research GmbH	\$23.28	\$23.33	0.21%	buy	buy
ISS-EVA				underweight	underweight
JP Morgan	\$21.00	\$19.83	-5.57%	neutral	neutral
Keefe Bruyette & Woods	\$21.89	\$22.16	1.23%	outperform	outperform
Kepler Cheuvreux	\$19.80	\$20.41	3.08%	buy	buy
M.M.Warburg Co.	\$19.79	\$19.79	0.00%	hold	hold
Macquarie	\$21.70	\$19.37	-10.74%	outperform	neutral
Mainfirst	\$19.77	\$19.83	0.30%	neutral	neutral
Mediobanca	\$15.33	\$15.97	4.17%	underperform	underperform
Morgan Stanley	\$18.16	\$19.48	7.27%	Equalwt/In-Line	Equalwt/In-Line
Morningstar				hold	hold
Natixis	\$13.99	\$15.85	13.30%	reduce	reduce
NORD/LB	\$17.38	\$16.91	-2.70%	sell	sell
Oddo BHF	\$15.47	\$15.47	0.00%	neutral	neutral
RBC Capital	\$16.33	\$16.33	0.00%	sector perform	sector perform
Redburn				neutral	neutral
Societe Generale	\$11.19	\$12.13	8.40%	sell	sell
Wise-owl.com	\$22.23	\$22.23	0.00%	buy	buy
Total	\$18.48	\$18.59	0.56%		

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

10/26/2017	Third-Quarter 2017 Earnings Results				
Firm	Price Target as of 10/25/2017	Price Target as of 10/31/2017	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$15.22	\$15.30	0.53%	reduce	reduce
Banco Sabadell	\$16.22	\$16.22	0.00%	sell	sell
Bankhaus Lampe	\$23.57	\$23.36	-0.89%	buy	buy
Bankhaus Metzler	\$15.46	\$15.46	0.00%	sell	sell
Berenberg	\$12.79	\$12.79	0.00%	sell	sell
BNP Paribas Exane	\$14.70	\$14.37	-2.24%	underperform	underperform
Citi	\$11.16	\$11.05	-0.99%	sell	sell
Commerzbank	\$17.92	\$17.52	-2.23%	reduce	reduce
Creative Global Investments		\$21.03			buy
Credit Suisse	\$17.09	\$16.94	-0.88%	neutral	neutral
Day by Day	\$10.27	\$10.27	0.00%	sell	sell
DZ Bank AG Research	\$21.58	\$20.44	-5.28%	buy	buy
Equinet Bank AG	\$20.71	\$20.71	0.00%	buy	buy
Equita SIM	\$24.06	\$24.06	0.00%	hold	hold
Goldman Sachs	\$18.59	\$18.59	0.00%	neutral/neutral	neutral/neutral
Grupo Santander	\$19.40	\$19.40	0.00%	underweight	underweight
Hamburger Sparkasse				neutral	neutral
Hammer Partners	\$18.55	\$18.55	0.00%	neutral	neutral
HSBC	\$16.71	\$16.71	0.00%	hold	hold
Independent Research GmbH	\$22.32	\$22.20	-0.54%	buy	buy
JP Morgan	\$20.31	\$18.54	-8.71%	neutral	neutral
Keefe Bruyette & Woods	\$17.72	\$17.52	-1.13%	market perform	market perform
Kepler Cheuvreux	\$20.41	\$20.44	0.15%	buy	buy
M.M.Warburg Co.	\$18.19	\$18.19	0.00%	hold	hold
Macquarie	\$14.64	\$14.49	-1.02%	underperform	underperform
Mainfirst	\$16.44	\$16.35	-0.55%	neutral	neutral
Mediobanca	\$15.51	\$15.30	-1.35%	underperform	underperform
Morgan Stanley	\$19.21	\$17.52	-8.80%	Equalwt/In-Line	Equalwt/In-Line
Morningstar				hold	hold
Natixis	\$15.85	\$14.49	-8.58%	reduce	reduce
NORD/LB	\$16.91	\$16.94	0.18%	sell	hold
Oddo BHF	\$17.06	\$16.34	-4.22%	neutral	neutral
RBC Capital	\$15.83	\$15.07	-4.80%	sector perform	sector perform
Redburn				neutral	neutral
Societe Generale	\$12.56	\$12.17	-3.11%	sell	sell
Wise-owl.com	\$22.23	\$22.23	0.00%	buy	buy
Total	\$17.47	\$17.29	-1.06%		

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

2/2/2018	Fourth-Quarter/Full-Year 2017 Earnings Results				
Firm	Price Target as of 2/1/2018	Price Target as of 2/7/2018	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$18.47	\$15.34	-16.95%	reduce	reduce
Banco Sabadell	\$16.42	\$16.42	0.00%	sell	sell
Bankhaus Lampe	\$22.33	\$20.86	-6.58%	buy	buy
Bankhaus Metzler	\$15.57	\$15.57	0.00%	sell	sell
Berenberg	\$14.32	\$14.32	0.00%	sell	sell
BNP Paribas Exane	\$14.50	\$15.29	5.45%	underperform	underperform
Citi	\$11.62	\$11.77	1.29%	sell	sell
Commerzbank	\$17.52	\$17.52	0.00%	reduce	reduce
Credit Suisse	\$19.97	\$18.64	-6.66%	neutral	neutral
Day by Day	\$10.27	\$10.27	0.00%	sell	sell
DZ Bank AG Research	\$21.08	\$20.57	-2.42%	buy	buy
Equinet Bank AG	\$22.35	\$22.35	0.00%	buy	buy
Goldman Sachs	\$18.50	\$18.50	0.00%	neutral/neutral	neutral/neutral
Grupo Santander	\$19.40	\$19.40	0.00%	underweight	underweight
Hammer Partners	\$18.67	\$19.45	4.18%	neutral	neutral
HSBC	\$19.16	\$19.16	0.00%	hold	hold
Independent Research GmbH	\$21.56	\$21.20	-1.67%	buy	buy
JP Morgan	\$19.07	\$17.40	-8.76%	neutral	neutral
Keefe Bruyette & Woods	\$18.20	\$16.16	-11.21%	underperform	underperform
Kepler Cheuvreux				not rated	not rated
M.M.Warburg Co.	\$17.33	\$17.33	0.00%	hold	hold
Macquarie	\$15.17	\$15.54	2.44%	underperform	underperform
Mainfirst	\$18.62	\$14.72	-20.95%	neutral	underperform
Mediobanca	\$17.14	\$16.16	-5.72%	underperform	underperform
Morgan Stanley	\$18.31	\$16.65	-9.07%	Equalwt/In-Line	Equalwt/In-Line
Morningstar		\$21.68		hold	buy
Natixis	\$14.01	\$13.30	-5.07%	reduce	reduce
NORD/LB	\$18.98	\$18.70	-1.48%	hold	hold
Oddo BHF	\$18.66	\$18.66	0.00%	neutral	neutral
RBC Capital	\$19.28	\$16.78	-12.97%	sector perform	sector perform
Redburn				neutral	neutral
Societe Generale	\$12.56	\$13.05	3.90%	sell	sell
Total	\$17.55	\$17.09	-2.63%		

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

4/26/2018	First-Quarter 2018 Earnings Results				
Firm	Price Target as of 4/25/2018	Price Target as of 5/1/2018	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$13.70	\$12.22	-10.80%	reduce	reduce
Banco Sabadell	\$15.15	\$15.15	0.00%	sell	sell
Bankhaus Lampe	\$20.90	\$20.61	-1.39%	buy	buy
Bankhaus Metzler	\$13.50	\$13.34	-1.19%	sell	sell
Berenberg	\$14.81	\$14.81	0.00%	sell	sell
BNP Paribas Exane	\$14.44	\$12.61	-12.67%	underperform	underperform
Citi	\$10.62	\$10.43	-1.79%	sell	sell
Commerzbank	\$13.58	\$13.34	-1.77%	reduce	reduce
Credit Suisse	\$16.05	\$14.53	-9.47%	neutral	neutral
Day by Day	\$10.75	\$10.75	0.00%	sell	sell
DZ Bank AG Research	\$16.75	\$16.37	-2.27%	buy	buy
Equinet Bank AG	\$22.15	\$16.98	-23.34%	buy	buy
Goldman Sachs	\$18.27	\$18.27	0.00%	neutral/neutral	neutral/neutral
Grupo Santander	\$19.40	\$19.40	0.00%	underweight	underweight
Hammer Partners	\$16.98	\$16.98	0.00%	neutral	neutral
HSBC	\$14.78	\$14.78	0.00%	hold	hold
Independent Research GmbH	\$13.55	\$12.73	-6.05%	sell	sell
JP Morgan	\$14.69	\$14.53	-1.09%	neutral	neutral
Keefe Bruyette & Woods	\$11.00	\$10.90	-0.91%	underperform	underperform
Kepler Cheuvreux				not rated	not rated
M.M.Warburg Co.	\$15.51	\$15.51	0.00%	hold	hold
Macquarie	\$13.07	\$12.72	-2.68%	underperform	underperform
Mainfirst	\$12.93	\$12.73	-1.55%	underperform	underperform
Mediobanca	\$13.58	\$13.32	-1.91%	underperform	underperform
Morgan Stanley	\$15.27	\$15.26	-0.07%	Equalwt/In-Line	Equalwt/In-Line
Morningstar	\$19.20	\$21.22	10.52%	buy	buy
Natixis	\$13.30	\$12.11	-8.95%	reduce	reduce
NORD/LB	\$15.40	\$15.16	-1.56%	hold	hold
Oddo BHF	\$13.53	\$13.34	-1.40%	neutral	neutral
RBC Capital	\$14.78	\$14.53	-1.69%	sector perform	sector perform
Redburn				neutral	neutral
Societe Generale	\$12.34	\$9.69	-21.47%	sell	sell
Spin-Off Research	\$13.50	\$13.50	0.00%	hold	hold
Total	\$14.95	\$14.45	-3.38%		

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

7/25/2018	Second-Quarter 2018 Earnings Results				
Firm	Price Target as of 7/24/2018	Price Target as of 7/30/2018	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$10.01	\$10.80	7.89%	sell	sell
Banco Sabadell	\$15.15	\$15.15	0.00%	sell	sell
Bankhaus Lampe	\$17.56	\$16.32	-7.06%	buy	buy
Bankhaus Metzler	\$11.37	\$11.43	0.53%	hold	hold
Barclays	\$9.36	\$9.34	-0.21%	underweight	underweight
Berenberg	\$14.05	\$14.05	0.00%	sell	sell
BNP Paribas Exane	\$11.18	\$10.51	-5.99%	underperform	underperform
Citi	\$8.71	\$8.75	0.46%	sell	sell
Commerzbank	\$12.88	\$12.85	-0.23%	hold	hold
Credit Suisse	\$12.77	\$12.83	0.47%	neutral	neutral
Day by Day	\$6.90	\$6.91	0.14%	sell	sell
DZ Bank AG Research	\$11.12	\$11.68	5.04%	hold	hold
Equinet Bank AG	\$16.98	\$16.98	0.00%	buy	buy
Goldman Sachs	\$14.64	\$14.64	0.00%	neutral/neutral	neutral/neutral
Grupo Santander				underweight	underweight
Hammer Partners	\$10.37	\$10.37	0.00%	neutral	neutral
HSBC	\$13.98	\$13.98	0.00%	hold	hold
Independent Research GmbH	\$10.49	\$10.51	0.19%	sell	sell
ISS-EVA					underweight
JP Morgan	\$12.82	\$12.25	-4.45%	neutral	neutral
Keefe Bruyette & Woods	\$10.51	\$11.72	11.51%	underperform	underperform
Kepler Cheuvreux	\$9.86	\$10.15	2.94%	reduce	reduce
M.M.Warburg Co.	\$12.14	\$12.14	0.00%	hold	hold
Mainfirst	\$11.65	\$11.68	0.26%	neutral	neutral
Mediobanca	\$10.54	\$10.50	-0.38%	underperform	underperform
Morgan Stanley	\$10.54	\$10.51	-0.28%	Equalwt/In-Line	Equalwt/In-Line
Morningstar	\$17.56	\$17.49	-0.40%	buy	buy
NORD/LB	\$13.46	\$12.85	-4.53%	hold	hold
Oddo BHF	\$11.00	\$11.00	0.00%	reduce	reduce
RBC Capital	\$9.36	\$9.34	-0.21%	underperform	underperform
Redburn				neutral	neutral
Societe Generale	\$9.37	\$9.37	0.00%	sell	sell
Total	\$11.94	\$11.93	-0.07%		

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

10/24/2018	Third-Quarter 2018 Earnings Results				
Firm	Price Target as of 10/23/2018	Price Target as of 10/29/2018	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$10.19	\$9.55	-6.28%	reduce	reduce
Banco Sabadell	\$10.36	\$10.36	0.00%	sell	sell
Bankhaus Lampe	\$16.13	\$13.68	-15.19%	buy	buy
Bankhaus Metzler	\$11.44	\$10.92	-4.55%	hold	hold
Barclays	\$9.25	\$9.10	-1.62%	underweight	underweight
Berenberg	\$9.27	\$9.27	0.00%	sell	sell
BNP Paribas Exane	\$10.33	\$10.25	-0.77%	underperform	underperform
Citi	\$8.18	\$8.09	-1.10%	sell	sell
Commerzbank	\$12.62	\$11.39	-9.75%	hold	hold
Credit Suisse	\$11.53	\$10.80	-6.33%	neutral	neutral
Day by Day	\$8.89	\$8.89	0.00%	sell	sell
DZ Bank AG Research	\$11.68	\$11.17	-4.37%	hold	hold
Equinet Bank AG	\$16.98	\$16.98	0.00%	buy	buy
Goldman Sachs	\$13.37	\$13.37	0.00%	neutral/neutral	neutral/neutral
Grupo Santander	\$9.96	\$9.96	0.00%	underweight	underweight
Hammer Partners	\$9.35	\$9.35	0.00%	sell	sell
HSBC	\$12.71	\$11.39	-10.39%	hold	hold
Independent Research GmbH	\$10.51	\$9.68	-7.90%	sell	sell
ISS-EVA				underweight	underweight
JP Morgan	\$12.18	\$11.96	-1.81%	neutral	neutral
Keefe Bruyette & Woods	\$11.48	\$10.25	-10.71%	underperform	underperform
Kepler Cheuvreux	\$10.15	\$10.35	1.97%	reduce	reduce
M.M.Warburg Co.	\$12.14	\$12.14	0.00%	hold	hold
Mainfirst	\$12.10	\$11.96	-1.16%	neutral	neutral
Mediobanca	\$10.32	\$9.55	-7.46%	underperform	underperform
Morgan Stanley	\$10.51	\$10.25	-2.47%	Underwt/In-Line	Underwt/In-Line
Morningstar	\$17.49	\$13.67	-21.84%	buy	buy
NORD/LB	\$12.85	\$10.88	-15.33%	hold	hold
Oddo BHF	\$10.83	\$10.83	0.00%	reduce	reduce
RBC Capital	\$9.20	\$9.11	-0.98%	underperform	underperform
Redburn				neutral	neutral
Societe Generale	\$9.22	\$7.40	-19.74%	sell	sell
Total	\$11.37	\$10.75	-5.47%		

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

2/1/2019	Fourth-Quarter/Full-Year 2018 Earnings Results				
Firm	Price Target as of 1/31/2019	Price Target as of 2/6/2019	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$8.00	\$7.63	-4.63%	sell	sell
Banco Sabadell	\$10.36	\$10.36	0.00%	sell	sell
Bankhaus Lampe	\$12.55	\$12.62	0.56%	buy	buy
Bankhaus Metzler	\$10.90	\$10.09	-7.43%	hold	hold
Barclays	\$7.42	\$7.45	0.40%	underweight	underweight
Berenberg	\$9.13	\$8.00	-12.38%	sell	sell
BNP Paribas Exane	\$7.96	\$8.00	0.50%	underperform	underperform
Citi	\$7.62	\$7.43	-2.49%	sell	sell
Commerzbank	\$10.17	\$10.32	1.47%	hold	hold
Credit Suisse	\$9.68	\$9.14	-5.58%	neutral	neutral
Day by Day	\$6.66	\$6.66	0.00%	sell	sell
DZ Bank AG Research	\$8.24	\$8.60	4.37%	hold	hold
Goldman Sachs	\$11.37	\$11.37	0.00%	neutral/neutral	neutral/neutral
Grupo Santander	\$9.86	\$9.86	0.00%	underweight	underweight
HSBC	\$11.39	\$9.70	-14.84%	hold	hold
Independent Research GmbH	\$8.03	\$8.03	0.00%	sell	sell
ISS-EVA				underweight	underweight
JP Morgan	\$9.15	\$9.14	-0.11%	neutral	neutral
Keefe Bruyette & Woods	\$6.87	\$6.86	-0.15%	underperform	underperform
Kepler Cheuvreux	\$10.37	\$7.42	-28.45%	reduce	reduce
M.M.Warburg Co.	\$8.67	\$8.67	0.00%	hold	hold
Mainfirst	\$9.16	\$9.18	0.22%	neutral	neutral
Mediobanca	\$9.63	\$7.99	-17.03%	underperform	underperform
Morgan Stanley	\$9.12	\$9.18	0.66%	Underwt/In-Line	Underwt/In-Line
Morningstar	\$13.67	\$10.50	-23.19%	buy	hold
NORD/LB	\$10.88	\$9.18	-15.63%	hold	hold
Oddo BHF	\$10.72	\$8.12	-24.25%	reduce	reduce
Pareto Securities	\$9.61	\$9.13	-4.99%	hold	hold
RBC Capital	\$8.58	\$8.60	0.23%	underperform	underperform
Redburn				neutral	neutral
Societe Generale	\$6.31	\$6.27	-0.63%	sell	sell
Zacks				sell	sell
Total	\$9.38	\$8.81	-6.09%		

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

4/26/2019	First-Quarter 2019 Earnings Results				
Firm	Price Target as of 4/25/2019	Price Target as of 5/1/2019	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$8.49	\$8.48	-0.12%	reduce	reduce
Banco Sabadell	\$10.36	\$10.36	0.00%	sell	sell
Bankhaus Lampe	\$12.48	\$12.28	-1.60%	buy	buy
Bankhaus Metzler	\$9.36	\$9.38	0.21%	hold	hold
Barclays	\$7.24	\$7.31	0.97%	underweight	underweight
Berenberg	\$7.91	\$7.91	0.00%	sell	sell
BNP Paribas Exane	\$7.91	\$7.81	-1.26%	underperform	underperform
Citi	\$6.81	\$6.71	-1.47%	sell	sell
Commerzbank	\$10.32	\$8.94	-13.37%	hold	hold
Credit Suisse	\$8.91	\$7.27	-18.41%	neutral	underperform
Day by Day	\$6.56	\$6.52	-0.61%	sell	sell
DZ Bank AG Research	\$8.50	\$8.37	-1.53%	hold	hold
Goldman Sachs		\$9.39		not rated	neutral
Grupo Santander	\$9.86	\$9.86	0.00%	underweight	underweight
HSBC	\$9.54	\$9.54	0.00%	hold	hold
Independent Research GmbH	\$7.93	\$7.81	-1.51%	sell	sell
ISS-EVA				underweight	underweight
JP Morgan	\$7.80	\$7.83	0.38%	neutral	neutral
Keefe Bruyette & Woods	\$6.68	\$6.75	1.05%	underperform	underperform
Kepler Cheuvreux	\$7.35	\$7.27	-1.09%	reduce	reduce
M.M.Warburg Co.	\$8.67	\$8.67	0.00%	hold	hold
Mediobanca	\$7.56	\$7.49	-0.93%	underperform	underperform
Morgan Stanley		\$7.64		restricted	Underwt/In-Line
Morningstar	\$10.42	\$10.29	-1.25%	hold	hold
NORD/LB	\$7.93	\$8.93	12.61%	sell	hold
Oddo BHF	\$7.96	\$7.94	-0.25%	reduce	reduce
Pareto Securities	\$8.91	\$8.94	0.34%	hold	hold
RBC Capital	\$8.35	\$8.37	0.24%	underperform	underperform
Redburn				neutral	neutral
Societe Generale	\$6.21	\$6.15	-0.97%	sell	sell
Zacks				hold	hold
Total	\$8.46	\$8.36	-1.15%		

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

7/24/2019	Second-Quarter 2019 Earnings Results				
Firm	Price Target as of 7/23/2019	Price Target as of 7/29/2019	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$7.34	\$7.42	1.09%	reduce	reduce
Banco Sabadell	\$10.36	\$10.36	0.00%	sell	sell
Bankhaus Lampe	\$10.11	\$10.03	-0.79%	buy	buy
Bankhaus Metzler	\$7.62	\$7.62	0.00%	hold	hold
Barclays	\$5.61	\$5.56	-0.89%	underweight	underweight
Berenberg	\$6.73	\$6.73	0.00%	sell	sell
BNP Paribas Exane	\$7.81	\$6.67	-14.60%	underperform	underperform
Citi	\$7.18	\$6.68	-6.96%	sell	sell
Commerzbank	\$8.97	\$8.92	-0.56%	hold	hold
Credit Suisse	\$6.74	\$6.68	-0.89%	underperform	underperform
Day by Day	\$4.60	\$4.57	-0.65%	sell	sell
DZ Bank AG Research	\$7.77	\$7.69	-1.03%	hold	hold
Goldman Sachs	\$8.75	\$8.75	0.00%	neutral	neutral
Grupo Santander	\$4.49	\$4.49	0.00%	underweight	underweight
HSBC	\$7.74	\$7.74	0.00%	hold	hold
Independent Research GmbH	\$8.13	\$8.08	-0.62%	hold	hold
ISS-EVA				underweight	underweight
JP Morgan	\$7.01	\$6.96	-0.71%	neutral	neutral
Keefe Bruyette & Woods	\$6.76	\$6.68	-1.18%	underperform	underperform
Kepler Cheuvreux	\$7.29	\$7.23	-0.82%	hold	hold
M.M.Warburg Co.	\$8.67	\$8.67	0.00%	hold	hold
Mediobanca	\$6.95	\$6.95	0.00%	underperform	underperform
Morgan Stanley	\$7.07	\$7.02	-0.71%	Underwt/In-Line	Underwt/In-Line
Morningstar	\$10.11	\$10.03	-0.79%	buy	buy
NORD/LB	\$7.96	\$7.96	0.00%	hold	hold
Oddo BHF	\$7.97	\$7.97	0.00%	reduce	reduce
Pareto Securities	\$8.92	\$8.92	0.00%	hold	hold
RBC Capital	\$7.85	\$7.79	-0.76%	underperform	underperform
Redburn				neutral	neutral
Societe Generale	\$4.49	\$4.45	-0.89%	sell	sell
Zacks	\$9.00	\$9.00	0.00%	neutral	neutral
Total	\$7.59	\$7.50	-1.08%		

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

10/30/2019	Third-Quarter 2019 Earnings Results				
Firm	Price Target as of 10/29/2019	Price Target as of 11/4/2019	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$7.50	\$7.10	-5.33%	reduce	reduce
Banco Sabadell	\$10.36	\$10.36	0.00%	sell	sell
Bankhaus Lampe	\$8.91			buy	
Bankhaus Metzler	\$6.84	\$6.84	0.00%	sell	sell
Barclays	\$5.54	\$5.56	0.36%	underweight	underweight
Berenberg	\$6.14	\$6.13	-0.16%	sell	sell
BNP Paribas Exane	\$6.68	\$6.68	0.00%	underperform	underperform
Citi	\$6.47	\$6.46	-0.15%	sell	sell
Commerzbank	\$8.88	\$8.89	0.11%	hold	hold
Credit Suisse	\$6.66	\$6.67	0.15%	underperform	underperform
Day by Day	\$4.55	\$4.57	0.44%	sell	sell
DZ Bank AG Research	\$7.69	\$7.67	-0.26%	hold	hold
Goldman Sachs	\$9.14	\$9.14	0.00%	neutral	neutral
Grupo Santander	\$4.44	\$4.44	0.00%	underweight	underweight
HSBC	\$6.89	\$6.89	0.00%	hold	hold
Independent Research GmbH	\$6.68	\$6.80	1.80%	sell	sell
ISS-EVA				underweight	underweight
JP Morgan	\$6.94	\$6.67	-3.89%	neutral	neutral
Keefe Bruyette & Woods	\$6.69	\$6.67	-0.30%	underperform	underperform
Kepler Cheuvreux	\$7.23	\$6.70	-7.33%	hold	hold
M.M.Warburg Co.	\$8.67	\$8.67	0.00%	hold	hold
Mediobanca	\$6.40	\$6.40	0.00%	underperform	underperform
Morgan Stanley	\$6.62	\$6.67	0.76%	Underwt/In-Line	Underwt/In-Line
Morningstar	\$10.10	\$10.10	0.00%	buy	buy
NORD/LB	\$7.96	\$7.96	0.00%	hold	hold
Oddo BHF	\$8.66	\$8.66	0.00%	reduce	reduce
Pareto Securities	\$8.82	\$8.82	0.00%	hold	hold
RBC Capital	\$7.75	\$7.78	0.39%	underperform	underperform
Redburn				neutral	neutral
Societe Generale	\$4.38	\$4.46	1.83%	sell	sell
Zacks	\$8.00	\$8.00	0.00%	neutral	neutral
Total	\$7.30	\$7.21	-1.24%		

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

1/30/2020	Fourth-Quarter/Full-Year 2019 Earnings Results				
Firm	Price Target as of 1/29/2020	Price Target as of 2/4/2020	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$7.65	\$7.74	1.18%	reduce	sell
Banco Sabadell	\$10.36	\$10.36	0.00%	sell	sell
Bankhaus Metzler	\$6.88	\$6.87	-0.15%	sell	sell
Barclays	\$5.55	\$5.54	-0.18%	underweight	underweight
Berenberg	\$6.13	\$6.13	0.00%	sell	sell
BNP Paribas Exane	\$6.66	\$6.87	3.15%	underperform	underperform
Citi	\$7.17	\$7.43	3.63%	sell	sell
Commerzbank	\$8.82	\$9.38	6.35%	hold	hold
Credit Suisse	\$6.60	\$6.65	0.76%	underperform	underperform
Day by Day	\$4.52			sell	hold
DZ Bank AG Research	\$7.65	\$8.39	9.67%	hold	hold
Goldman Sachs	\$9.09	\$9.09	0.00%	neutral	neutral
Grupo Santander	\$4.40	\$4.40	0.00%	underweight	underweight
HSBC	\$6.89	\$6.89	0.00%	hold	hold
Independent Research GmbH	\$6.78	\$7.54	11.21%	sell	sell
ISS-EVA				underweight	underweight
JP Morgan	\$6.66	\$7.76	16.52%	neutral	neutral
Keefe Bruyette & Woods	\$5.53	\$5.52	-0.18%	underperform	underperform
Kepler Cheuvreux	\$7.78	\$7.74	-0.51%	hold	hold
M.M. Warburg Co.	\$8.36	\$8.36	0.00%	hold	hold
Mediobanca	\$6.39	\$7.09	10.95%	underperform	underperform
Morgan Stanley	\$6.68	\$6.62	-0.90%	Underwt/Attractive	Underwt/Attractive
Morningstar	\$10.01	\$9.95	-0.60%	hold	hold
NORD/LB	\$7.96	\$8.72	9.55%	hold	hold
Oddo BHF	\$8.76	\$8.76	0.00%	reduce	reduce
Pareto Securities	\$8.81	\$8.85	0.45%	hold	hold
RBC Capital	\$7.78	\$8.28	6.43%	underperform	underperform
Redburn				neutral	neutral
Societe Generale	\$4.45	\$8.87	99.33%	sell	hold
Zacks	\$8.00	\$8.00	0.00%	neutral	neutral
Total	\$7.23	\$7.70	6.51%		

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

4/29/2020	First-Quarter 2020 Earnings Results				
Firm	Price Target as of 4/28/2020	Price Target as of 5/4/2020	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$5.15	\$5.65	9.71%	sell	sell
Banco Sabadell	\$10.36	\$10.36	0.00%	sell	sell
Bankhaus Metzler	\$6.07	\$6.07	0.00%	sell	sell
Barclays	\$3.79	\$3.85	1.58%	underweight	underweight
Berenberg	\$4.89	\$4.89	0.00%	sell	sell
BNP Paribas Exane	\$5.41	\$5.45	0.74%	underperform	underperform
Citi	\$4.33	\$4.34	0.23%	sell	sell
Commerzbank	\$6.49	\$7.66	18.03%	hold	hold
Credit Suisse	\$5.41	\$5.47	1.11%	underperform	underperform
Day by Day	\$4.15	\$4.85	16.87%	sell	sell
DZ Bank AG Research	\$5.95	\$6.51	9.41%	hold	hold
Goldman Sachs	\$7.14	\$7.14	0.00%	neutral	neutral
Grupo Santander	\$4.33	\$4.33	0.00%	underweight	underweight
HSBC	\$6.18	\$6.21	0.49%	hold	hold
Independent Research GmbH	\$6.08	\$6.12	0.66%	sell	sell
ISS-EVA				underweight	underweight
JP Morgan	\$6.49	\$6.89	6.16%	neutral	neutral
Keefe Bruyette & Woods	\$3.25	\$3.25	0.00%	underperform	underperform
Kepler Cheuvreux	\$4.37	\$4.37	0.00%	hold	hold
M.M. Warburg Co.	\$8.36	\$8.36	0.00%	hold	hold
Mediobanca	\$4.98	\$4.98	0.00%	underperform	underperform
Morgan Stanley	\$6.49	\$6.51	0.31%	Underwt/Attractive	Underwt/Attractive
Morningstar	\$7.60	\$7.66	0.79%	hold	hold
NORD/LB	\$7.03	\$7.66	8.96%	hold	hold
Oddo BHF	\$5.84	\$5.84	0.00%	reduce	reduce
Pareto Securities	\$8.66	\$8.72	0.69%	hold	hold
RBC Capital	\$5.43	\$6.59	21.36%	underperform	underperform
Redburn				neutral	neutral
Societe Generale	\$7.04	\$7.66	8.81%	hold	hold
Zacks	\$6.50	\$6.50	0.00%	neutral	neutral
Total	\$5.99	\$6.21	3.65%		

Exhibit 5C**Deutsche Bank AG****Analyst Price Targets and Rating Actions Surrounding Event Dates**

Source: Bloomberg

7/29/2020	Second-Quarter 2020 Earnings Results				
Firm	Price Target as of 7/28/2020	Price Target as of 8/3/2020	% Change in Price Target	Pre-Event Rating Action	Post-Event Rating Action
AlphaValue/Baader Europe	\$6.26	\$6.13	-2.08%	sell	sell
Banco Sabadell	\$10.36	\$10.36	0.00%	sell	sell
Bankhaus Metzler	\$6.87	\$6.87	0.00%	sell	sell
Barclays	\$5.18	\$5.30	2.32%	underweight	underweight
Berenberg	\$5.15	\$5.15	0.00%	sell	sell
BNP Paribas Exane	\$5.87	\$5.89	0.34%	underperform	underperform
Citi	\$8.58	\$8.83	2.91%	sell	sell
Commerzbank	\$7.98	\$8.24	3.26%	hold	hold
Credit Suisse	\$5.72	\$6.49	13.46%	underperform	underperform
Day by Day				hold	hold
DZ Bank AG Research	\$9.02	\$9.42	4.43%	hold	hold
Goldman Sachs	\$7.14	\$7.14	0.00%	neutral	neutral
Grupo Santander	\$4.70	\$4.70	0.00%	underweight	underweight
HSBC	\$8.00	\$8.00	0.00%	hold	hold
Independent Research GmbH	\$6.12	\$7.91	29.25%	sell	sell
ISS-EVA				underweight	underweight
JP Morgan	\$7.84	\$8.24	5.10%	neutral	neutral
Keefe Bruyette & Woods	\$6.80	\$7.06	3.82%	underperform	underperform
Kepler Cheuvreux	\$7.34	\$8.22	11.99%	reduce	reduce
M.M. Warburg Co.	\$9.04	\$9.04	0.00%	hold	hold
Mediobanca	\$5.84	\$6.14	5.14%	underperform	underperform
Morgan Stanley	\$8.06	\$8.83	9.55%	Underwt/Attractive	Underwt/Attractive
Morningstar	\$7.60	\$9.50	25.00%	sell	hold
NORD/LB	\$7.66	\$9.07	18.41%	hold	hold
Oddo BHF	\$6.08	\$6.08	0.00%	reduce	reduce
Pareto Securities	\$9.05	\$9.42	4.09%	hold	hold
RBC Capital	\$7.90	\$8.24	4.30%	underperform	underperform
Redburn				neutral	neutral
Societe Generale	\$8.57	\$8.58	0.12%	sell	sell
Zacks	\$6.50	\$11.80	81.54%	neutral	neutral
Total	\$7.23	\$7.80	7.90%		

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
1	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/13/2017	
2	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/15/2017	
3	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/15/2017	
4	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/17/2017	
5	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/17/2017	
6	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/20/2017	
7	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/20/2017	
8	IRANNOTICE	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/20/2017	
9	20-F	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/20/2017	12/31/2016
10	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/20/2017	3/20/2017
11	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/20/2017	
12	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/21/2017	
13	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/21/2017	
14	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/23/2017	
15	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/23/2017	
16	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/27/2017	
17	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/27/2017	
18	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/28/2017	
19	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/29/2017	
20	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/29/2017	3/1/2017
21	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/29/2017	3/1/2017
22	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/29/2017	
23	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/30/2017	
24	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/30/2017	
25	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/3/2017	
26	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/5/2017	
27	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/5/2017	
28	424B5	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/7/2017	
29	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/7/2017	
30	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/7/2017	
31	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/10/2017	
32	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/11/2017	
33	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/12/2017	
34	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/13/2017	
35	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/13/2017	
36	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/17/2017	
37	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/18/2017	4/18/2017
38	F-N	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/19/2017	
39	F-4	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/19/2017	
40	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/24/2017	
41	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/26/2017	
42	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/27/2017	
43	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/27/2017	4/27/2017
44	SC 13D	DEUTSCHE BANK AKTIENGESELLSCHAFT(C-QUADRAT SPECIAL SITUATIONS DEDICATED FUND)	5/2/2017	
45	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/2/2017	
46	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/3/2017	
47	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/3/2017	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
48	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/5/2017	5/5/2017
49	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/8/2017	
50	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/8/2017	
51	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/9/2017	5/9/2017
52	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/10/2017	
53	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/10/2017	
54	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/11/2017	
55	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/12/2017	
56	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/12/2017	
57	EFFECT	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/12/2017	
58	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/15/2017	
59	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/16/2017	
60	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/16/2017	
61	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/16/2017	
62	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/16/2017	
63	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/16/2017	
64	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/16/2017	
65	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/16/2017	
66	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/17/2017	
67	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/17/2017	
68	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/18/2017	
69	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/18/2017	
70	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/18/2017	
71	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/19/2017	
72	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/22/2017	
73	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/22/2017	
74	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/22/2017	5/22/2017
75	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/23/2017	
76	SC 13D/A	DEUTSCHE BANK AKTIENGESELLSCHAFT(C-QUADRAT SPECIAL SITUATIONS DEDICATED FUND)	5/23/2017	
77	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/23/2017	
78	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/23/2017	
79	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/23/2017	
80	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/23/2017	
81	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/25/2017	
82	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/25/2017	
83	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/25/2017	
84	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/26/2017	
85	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/30/2017	
86	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/30/2017	
87	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/31/2017	
88	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/31/2017	
89	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/31/2017	
90	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/31/2017	
91	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/31/2017	
92	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/31/2017	
93	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/1/2017	
94	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/1/2017	
95	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/1/2017	
96	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/2/2017	
97	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/5/2017	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
98	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/6/2017	
99	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/6/2017	
100	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/6/2017	
101	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/6/2017	
102	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/6/2017	
103	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/6/2017	
104	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/6/2017	
105	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/7/2017	
106	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/7/2017	
107	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/8/2017	
108	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/8/2017	
109	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/9/2017	
110	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/12/2017	
111	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/13/2017	
112	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/13/2017	
113	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/13/2017	
114	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/13/2017	
115	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/13/2017	
116	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/13/2017	
117	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/14/2017	
118	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/19/2017	
119	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/20/2017	
120	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/20/2017	
121	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/20/2017	
122	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/20/2017	
123	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/20/2017	
124	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/20/2017	
125	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/20/2017	
126	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/21/2017	
127	F-N	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/22/2017	
128	F-3	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/22/2017	
129	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/22/2017	
130	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/26/2017	
131	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/26/2017	
132	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/30/2017	
133	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/3/2017	
134	EFFECT	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/3/2017	
135	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/5/2017	
136	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/6/2017	
137	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/6/2017	
138	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/6/2017	
139	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/6/2017	
140	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/6/2017	
141	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/6/2017	
142	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/6/2017	7/6/2017
143	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/6/2017	
144	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/7/2017	
145	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/7/2017	
146	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/10/2017	
147	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/10/2017	7/31/2017

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
148	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/11/2017	
149	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/11/2017	
150	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/11/2017	
151	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/11/2017	
152	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/11/2017	
153	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/11/2017	
154	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/11/2017	
155	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/12/2017	
156	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/12/2017	
157	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/12/2017	
158	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/12/2017	
159	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/12/2017	
160	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/12/2017	
161	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/12/2017	
162	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/12/2017	
163	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/13/2017	
164	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/13/2017	
165	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/13/2017	
166	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/13/2017	
167	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/14/2017	
168	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/14/2017	
169	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/14/2017	
170	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/14/2017	
171	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/14/2017	
172	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/14/2017	
173	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/17/2017	
174	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/17/2017	
175	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/17/2017	
176	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/17/2017	
177	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/18/2017	
178	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/18/2017	
179	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/18/2017	
180	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/18/2017	
181	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/19/2017	
182	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/19/2017	
183	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/19/2017	
184	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/21/2017	
185	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/25/2017	
186	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/25/2017	
187	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/26/2017	
188	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/26/2017	
189	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/27/2017	7/27/2017
190	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/28/2017	
191	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/28/2017	
192	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/1/2017	
193	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/1/2017	
194	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/1/2017	
195	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/1/2017	
196	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/2/2017	
197	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/2/2017	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
198	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/2/2017	
199	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/7/2017	
200	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/8/2017	
201	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/8/2017	
202	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/8/2017	
203	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/8/2017	
204	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/8/2017	
205	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/8/2017	
206	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/9/2017	
207	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/9/2017	
208	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/10/2017	
209	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/10/2017	
210	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/10/2017	
211	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/11/2017	
212	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/11/2017	
213	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/11/2017	
214	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/11/2017	
215	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/11/2017	
216	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/14/2017	
217	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/14/2017	
218	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/14/2017	
219	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/14/2017	
220	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/14/2017	
221	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/14/2017	
222	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/15/2017	
223	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/15/2017	
224	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/16/2017	
225	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/16/2017	
226	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/16/2017	
227	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/16/2017	
228	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/17/2017	
229	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/21/2017	
230	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/21/2017	
231	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/22/2017	
232	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/22/2017	
233	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/22/2017	
234	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/23/2017	
235	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/23/2017	
236	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/23/2017	
237	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/23/2017	
238	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/25/2017	
239	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/25/2017	
240	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/28/2017	
241	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/28/2017	
242	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/28/2017	
243	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/28/2017	
244	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/29/2017	
245	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/29/2017	
246	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/29/2017	
247	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/29/2017	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
248	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/30/2017	
249	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/30/2017	
250	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/30/2017	
251	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/1/2017	
252	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/1/2017	
253	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/1/2017	
254	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/6/2017	
255	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/6/2017	
256	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/7/2017	
257	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/8/2017	
258	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/13/2017	
259	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/13/2017	
260	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/13/2017	
261	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/13/2017	
262	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/15/2017	
263	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/15/2017	
264	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/18/2017	
265	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/18/2017	
266	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/19/2017	
267	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/19/2017	
268	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/19/2017	
269	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/19/2017	
270	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/19/2017	
271	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/20/2017	
272	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/22/2017	
273	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/22/2017	
274	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/22/2017	
275	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/26/2017	
276	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/26/2017	
277	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/27/2017	
278	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/27/2017	
279	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/27/2017	
280	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/27/2017	
281	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/27/2017	
282	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/27/2017	
283	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/27/2017	
284	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/27/2017	
285	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/27/2017	
286	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/28/2017	
287	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/28/2017	
288	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/28/2017	
289	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/28/2017	
290	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/29/2017	
291	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/2/2017	
292	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/2/2017	
293	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/2/2017	
294	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/3/2017	
295	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/3/2017	
296	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/3/2017	
297	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/3/2017	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
298	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/3/2017	
299	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/3/2017	
300	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/4/2017	
301	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/5/2017	
302	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/5/2017	
303	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/6/2017	
304	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/6/2017	
305	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/10/2017	
306	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/10/2017	
307	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/10/2017	
308	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/10/2017	
309	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/10/2017	
310	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/10/2017	
311	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/10/2017	
312	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/10/2017	
313	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/12/2017	
314	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/12/2017	
315	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/13/2017	
316	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/13/2017	
317	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/13/2017	
318	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/13/2017	
319	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/13/2017	
320	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/13/2017	
321	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/16/2017	
322	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/16/2017	
323	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/16/2017	
324	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/17/2017	
325	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/17/2017	
326	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/18/2017	
327	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/19/2017	
328	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/23/2017	
329	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/25/2017	
330	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/26/2017	
331	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/26/2017	
332	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/26/2017	10/26/2017
333	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/27/2017	
334	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/27/2017	
335	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/30/2017	
336	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/31/2017	
337	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/31/2017	
338	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/31/2017	
339	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/31/2017	
340	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/31/2017	
341	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/31/2017	
342	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/1/2017	
343	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/2/2017	
344	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/2/2017	
345	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/3/2017	11/3/2017
346	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/6/2017	
347	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/6/2017	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
348	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/6/2017	
349	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/6/2017	
350	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/7/2017	
351	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/7/2017	
352	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/8/2017	
353	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/8/2017	
354	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/8/2017	
355	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/8/2017	
356	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/8/2017	
357	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/8/2017	
358	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/8/2017	
359	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/8/2017	
360	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/9/2017	
361	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/9/2017	
362	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/9/2017	
363	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/9/2017	
364	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/13/2017	
365	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/13/2017	
366	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/13/2017	
367	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/13/2017	
368	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/14/2017	
369	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/14/2017	
370	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/14/2017	
371	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/14/2017	
372	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/14/2017	
373	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/14/2017	
374	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/14/2017	
375	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/14/2017	
376	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/14/2017	
377	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/15/2017	
378	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/15/2017	
379	25-NSE	DEUTSCHE BANK AKTIENGESELLSCHAFT(NYSE ARCA, INC.)	11/15/2017	
380	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/17/2017	
381	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/20/2017	
382	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/21/2017	
383	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/21/2017	
384	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/21/2017	
385	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/21/2017	
386	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/21/2017	
387	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/22/2017	
388	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/27/2017	
389	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/28/2017	
390	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/28/2017	
391	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/28/2017	11/28/2017
392	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/29/2017	
393	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/29/2017	
394	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/29/2017	
395	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/30/2017	
396	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/30/2017	
397	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/1/2017	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
398	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/1/2017	
399	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/1/2017	
400	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/1/2017	12/1/2017
401	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/1/2017	12/1/2017
402	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/1/2017	
403	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/1/2017	
404	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/1/2017	
405	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/4/2017	
406	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/4/2017	
407	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/4/2017	
408	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/4/2017	
409	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/5/2017	
410	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/5/2017	
411	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/8/2017	
412	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/11/2017	
413	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/11/2017	
414	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/11/2017	
415	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/11/2017	
416	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/11/2017	
417	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/11/2017	
418	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/12/2017	
419	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/12/2017	
420	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/12/2017	
421	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/12/2017	
422	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/12/2017	
423	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/14/2017	
424	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/14/2017	
425	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/18/2017	
426	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/20/2017	
427	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/20/2017	
428	SC 13D/A	DEUTSCHE BANK AKTIENGESELLSCHAFT(C-QUADRAT SPECIAL SITUATIONS DEDICATED FUND)	12/21/2017	
429	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/22/2017	
430	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/22/2017	
431	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/22/2017	
432	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/22/2017	
433	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/22/2017	
434	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/26/2017	
435	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/26/2017	
436	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/26/2017	
437	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/27/2017	
438	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/27/2017	
439	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/27/2017	
440	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/28/2017	
441	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/4/2018	
442	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/4/2018	
443	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/5/2018	
444	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/5/2018	1/5/2018
445	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/5/2018	
446	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/8/2018	
447	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/9/2018	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
448	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/9/2018	
449	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/9/2018	
450	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/9/2018	
451	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/10/2018	
452	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/10/2018	
453	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/10/2018	
454	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/10/2018	
455	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/10/2018	
456	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/10/2018	
457	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/11/2018	
458	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/11/2018	
459	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/12/2018	
460	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/12/2018	
461	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/12/2018	
462	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/12/2018	
463	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/12/2018	
464	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/16/2018	
465	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/16/2018	
466	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/16/2018	
467	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/16/2018	
468	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/16/2018	
469	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/17/2018	
470	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/17/2018	
471	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/17/2018	
472	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/17/2018	1/17/2018
473	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/18/2018	
474	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/18/2018	
475	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/18/2018	
476	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/19/2018	
477	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/19/2018	
478	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/19/2018	
479	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/19/2018	
480	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/23/2018	
481	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/23/2018	
482	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/24/2018	
483	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/24/2018	
484	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/25/2018	
485	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/25/2018	
486	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/25/2018	
487	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/25/2018	
488	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/25/2018	
489	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/26/2018	
490	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/26/2018	
491	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/26/2018	
492	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/29/2018	
493	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/29/2018	
494	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/29/2018	
495	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/29/2018	
496	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/29/2018	
497	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/30/2018	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
498	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/30/2018	
499	SC 13G/A	DEUTSCHE BANK AKTIENGESELLSCHAFT(BLACKROCK INC.)	1/30/2018	
500	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/30/2018	
501	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/30/2018	
502	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/31/2018	
503	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/31/2018	
504	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/31/2018	
505	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/31/2018	
506	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/31/2018	
507	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/31/2018	
508	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/31/2018	
509	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/31/2018	
510	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/1/2018	
511	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/1/2018	
512	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/2/2018	
513	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/2/2018	
514	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/2/2018	
515	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/2/2018	
516	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/2/2018	
517	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/2/2018	
518	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/2/2018	
519	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/5/2018	
520	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/5/2018	
521	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/5/2018	2/2/2018
522	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/6/2018	
523	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/6/2018	
524	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/6/2018	
525	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/6/2018	
526	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/6/2018	
527	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/6/2018	
528	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/6/2018	
529	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/6/2018	
530	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/6/2018	
531	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/6/2018	
532	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/6/2018	
533	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/7/2018	
534	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/7/2018	
535	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/7/2018	
536	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/7/2018	
537	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/8/2018	
538	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/8/2018	
539	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/8/2018	
540	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/8/2018	
541	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/8/2018	
542	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/9/2018	
543	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/9/2018	
544	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/9/2018	
545	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/9/2018	
546	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/12/2018	
547	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/12/2018	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
548	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/12/2018	
549	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/12/2018	
550	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/13/2018	
551	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/14/2018	
552	SC 13D/A	DEUTSCHE BANK AKTIENGESELLSCHAFT(C-QUADRAT SPECIAL SITUATIONS DEDICATED FUND)	2/15/2018	
553	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/16/2018	
554	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/16/2018	
555	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/21/2018	
556	25-NSE	DEUTSCHE BANK AKTIENGESELLSCHAFT(NEW YORK STOCK EXCHANGE LLC)	2/21/2018	
557	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/21/2018	
558	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/21/2018	
559	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/22/2018	
560	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/23/2018	
561	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/23/2018	
562	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/26/2018	
563	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/26/2018	
564	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/26/2018	
565	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/26/2018	
566	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/27/2018	
567	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/27/2018	
568	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/27/2018	
569	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/27/2018	
570	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/27/2018	
571	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/27/2018	
572	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/27/2018	
573	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/28/2018	
574	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/28/2018	
575	F-N	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/28/2018	
576	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/28/2018	
577	S-8	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/28/2018	
578	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/28/2018	
579	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/28/2018	
580	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/28/2018	
581	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/1/2018	
582	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/2/2018	
583	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/2/2018	
584	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/5/2018	
585	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/6/2018	
586	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/6/2018	
587	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/6/2018	
588	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/6/2018	
589	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/6/2018	
590	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/6/2018	
591	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/6/2018	
592	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/6/2018	
593	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/7/2018	
594	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/7/2018	
595	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/7/2018	
596	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/7/2018	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
597	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/7/2018	
598	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/8/2018	
599	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/8/2018	
600	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/8/2018	
601	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/8/2018	
602	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/9/2018	
603	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/9/2018	
604	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/9/2018	
605	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/13/2018	3/13/2018
606	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/13/2018	
607	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/13/2018	
608	IRANNOTICE	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/16/2018	
609	20-F	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/16/2018	12/31/2017
610	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/16/2018	
611	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/16/2018	
612	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/19/2018	
613	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/20/2018	
614	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/20/2018	
615	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/22/2018	
616	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/23/2018	3/19/2018
617	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/23/2018	3/20/2018
618	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/28/2018	
619	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/30/2018	
620	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/30/2018	
621	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/30/2018	
622	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/30/2018	
623	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/2/2018	
624	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/2/2018	
625	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/3/2018	
626	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/3/2018	
627	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/5/2018	4/5/2018
628	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/9/2018	4/9/2018
629	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/10/2018	
630	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/11/2018	
631	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/12/2018	
632	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/16/2018	
633	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/16/2018	
634	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/16/2018	
635	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/16/2018	
636	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/17/2018	
637	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/17/2018	
638	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/19/2018	
639	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/19/2018	
640	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/19/2018	
641	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/20/2018	4/20/2018
642	SC 13D/A	DEUTSCHE BANK AKTIENGESELLSCHAFT(C-QUADRAT SPECIAL SITUATIONS DEDICATED FUND)	4/20/2018	
643	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/20/2018	
644	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/20/2018	
645	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/23/2018	
646	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/23/2018	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
647	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/24/2018	
648	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/24/2018	
649	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/24/2018	
650	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/24/2018	
651	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/24/2018	
652	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/24/2018	
653	SC 13D/A	DEUTSCHE BANK AKTIENGESELLSCHAFT(C-QUADRAT SPECIAL SITUATIONS DEDICATED FUND)	4/26/2018	
654	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/26/2018	
655	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/27/2018	
656	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/27/2018	4/26/2018
657	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/27/2018	
658	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/30/2018	
659	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/30/2018	
660	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/1/2018	
661	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/1/2018	
662	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/1/2018	
663	25-NSE	DEUTSCHE BANK AKTIENGESELLSCHAFT(NYSE ARCA, INC.)	5/1/2018	
664	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/1/2018	
665	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/2/2018	
666	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/2/2018	5/2/2018
667	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/2/2018	
668	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/2/2018	
669	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/2/2018	
670	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/2/2018	
671	F-N	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/2/2018	
672	F-4	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/2/2018	
673	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/4/2018	
674	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/8/2018	
675	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/9/2018	
676	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/10/2018	
677	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/14/2018	
678	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/14/2018	
679	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/15/2018	
680	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/17/2018	
681	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/23/2018	
682	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/23/2018	
683	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/24/2018	
684	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/24/2018	
685	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/24/2018	5/24/2018
686	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/25/2018	5/25/2018
687	F-4/A	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/29/2018	
688	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/30/2018	
689	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/30/2018	
690	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/30/2018	5/30/2018
691	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/31/2018	
692	EFFECT	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/31/2018	
693	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/1/2018	6/1/2018
694	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/4/2018	
695	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/6/2018	6/6/2018
696	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/12/2018	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
697	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/10/2018	
698	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/11/2018	
699	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/13/2018	
700	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/16/2018	7/16/2018
701	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/17/2018	
702	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/17/2018	
703	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/17/2018	
704	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/17/2018	
705	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/17/2018	
706	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/18/2018	
707	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/24/2018	7/23/2018
708	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/25/2018	7/25/2017
709	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/27/2018	7/27/2018
710	F-N	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/30/2018	
711	F-3	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/30/2018	
712	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/7/2018	
713	F-3/A	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/14/2018	
714	25-NSE	DEUTSCHE BANK AKTIENGESELLSCHAFT(NYSE ARCA, INC.)	8/15/2018	
715	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/15/2018	
716	F-3/A	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/17/2018	
717	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/20/2018	
718	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/21/2018	8/20/2018
719	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/21/2018	
720	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/21/2018	
721	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/21/2018	
722	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/21/2018	
723	EFFECT	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/21/2018	
724	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/22/2018	
725	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/22/2018	
726	25-NSE	DEUTSCHE BANK AKTIENGESELLSCHAFT(NYSE ARCA, INC.)	8/23/2018	
727	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/31/2018	
728	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/31/2018	
729	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	8/31/2018	
730	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/5/2018	
731	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/10/2018	
732	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/19/2018	
733	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/19/2018	
734	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/21/2018	
735	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/24/2018	
736	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/1/2018	
737	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/2/2018	
738	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/2/2018	
739	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/3/2018	
740	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/3/2018	
741	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/3/2018	
742	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/9/2018	
743	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/10/2018	
744	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/11/2018	
745	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/15/2018	
746	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/15/2018	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
747	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/15/2018	
748	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/17/2018	
749	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/17/2018	
750	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/17/2018	
751	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/22/2018	
752	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/22/2018	
753	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/22/2018	
754	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/24/2018	10/24/2018
755	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/24/2018	
756	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/24/2018	
757	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/24/2018	
758	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/26/2018	10/26/2018
759	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/29/2018	10/29/2018
760	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/31/2018	
761	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/1/2018	11/1/2018
762	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/13/2018	
763	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/16/2018	
764	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/19/2018	
765	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/21/2018	
766	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/26/2018	
767	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/1/2019	
768	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/1/2019	2/1/2019
769	SC 13G/A	DEUTSCHE BANK AKTIENGESELLSCHAFT(BLACKROCK INC.)	2/4/2019	
770	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/4/2019	2/4/2019
771	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/5/2019	
772	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/11/2019	
773	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/13/2019	
774	SC 13D/A	DEUTSCHE BANK AKTIENGESELLSCHAFT(C-QUADRAT SPECIAL SITUATIONS DEDICATED FUND)	2/15/2019	
775	SC 13D/A	DEUTSCHE BANK AKTIENGESELLSCHAFT(C-QUADRAT SPECIAL SITUATIONS DEDICATED FUND)	3/15/2019	
776	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/18/2019	3/18/2019
777	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/19/2019	
778	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/21/2019	
779	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/21/2019	3/20/2019
780	20-F	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/25/2019	12/31/2018
781	IRANNOTICE	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/25/2019	
782	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/25/2019	3/22/2019
783	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/28/2019	12/31/2018
784	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/28/2019	12/31/2018
785	SC 13D/A	DEUTSCHE BANK AKTIENGESELLSCHAFT(C-QUADRAT SPECIAL SITUATIONS DEDICATED FUND)	3/28/2019	
786	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/29/2019	
787	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/2/2019	
788	25	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/2/2019	
789	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/15/2019	4/12/2019
790	424B3	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/22/2019	
791	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/26/2019	3/31/2019
792	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/30/2019	4/30/2019
793	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/9/2019	5/9/2019
794	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/20/2019	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
795	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/22/2019	
796	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/28/2019	5/24/2019
797	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/9/2019	7/9/2019
798	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/24/2019	6/30/2019
799	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/25/2019	7/25/2019
800	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/29/2019	7/26/2019
801	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/15/2019	10/15/2019
802	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/28/2019	10/28/2019
803	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	10/30/2019	9/30/2019
804	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/19/2019	11/19/2019
805	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/21/2019	
806	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/22/2019	
807	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	11/25/2019	
808	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/4/2019	
809	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/5/2019	
810	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	12/11/2019	12/11/2019
811	25-NSE	DEUTSCHE BANK AKTIENGESELLSCHAFT(NEW YORK STOCK EXCHANGE LLC)	12/31/2019	
812	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	1/30/2020	1/30/2020
813	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/3/2020	2/3/2020
814	SC 13G/A	DEUTSCHE BANK AKTIENGESELLSCHAFT(BLACKROCK INC.)	2/5/2020	
815	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/7/2020	2/7/2020
816	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/10/2020	
817	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/10/2020	2/10/2020
818	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/12/2020	
819	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/13/2020	
820	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/14/2020	2/14/2020
821	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	2/14/2020	
822	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/13/2020	3/13/2020
823	IRANNOTICE	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/20/2020	
824	20-F	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/20/2020	12/31/2019
825	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/24/2020	3/24/2020
826	6-K/A	DEUTSCHE BANK AKTIENGESELLSCHAFT	3/25/2020	3/25/2020
827	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/14/2020	4/14/2020
828	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/28/2020	4/28/2020
829	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	4/29/2020	3/31/2020
830	25-NSE	DEUTSCHE BANK AKTIENGESELLSCHAFT(NYSE ARCA, INC.)	5/20/2020	
831	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	5/22/2020	5/22/2020
832	25-NSE	DEUTSCHE BANK AKTIENGESELLSCHAFT(NEW YORK STOCK EXCHANGE LLC)	5/27/2020	
833	25-NSE	DEUTSCHE BANK CONTINGENT CAPITAL TRUST II(NEW YORK STOCK EXCHANGE LLC)	5/27/2020	
834	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/29/2020	
835	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/29/2020	6/29/2020
836	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	6/30/2020	
837	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/1/2020	
838	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/8/2020	7/8/2020
839	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/22/2020	7/21/2020
840	6-K	DEUTSCHE BANK AKTIENGESELLSCHAFT	7/29/2020	6/30/2020
841	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/10/2020	
842	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/10/2020	

Exhibit 6**Deutsche Bank AG****List of SEC Filings**Source: Edgar Pro (<http://pro.edgar-online.com/>)

Count	Form Type	Company (Filer)	Received	Period
843	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/11/2020	
844	FWP	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/11/2020	
845	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/14/2020	
846	424B2	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/14/2020	
847	40-APP/A	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/24/2020	
848	40-APP	DEUTSCHE BANK AKTIENGESELLSCHAFT	9/24/2020	

Exhibit 7**Deutsche Bank AG****Market Maker Activity from 3/2017 to 9/2020**

Source: Bloomberg (DB US Equity <GO>, BAS <GO>)

Number	Code	Market Maker	Volume
1	MSCO	MORGAN STANLEY & CO., INCORPOR	145,232,420
2	LEHM	BARCLAYS CAPITAL INC.	115,271,644
3	TRCM	TRC MARKETS LLC	89,586,461
4	LIME	LIME BROKERAGE LLC	70,247,325
5	INCA	INSTINET CORPORATION	30,344,321
6	TRBT	TRADEBOT SYSTEMS, INC.	23,407,044
7	UBSS	UBS SECURITIES LLC.	21,473,596
8	IBKR	INTERACTIVE BROKERS LLC	21,171,155
9	TSSM	TWO SIGMA SECURITIES	19,400,066
10	FQLS	QUANTLAB SECURITIES LP	16,348,122
11	GSCO	GOLDMAN SACHS	12,699,694
12	VALX		11,128,736
13	NFSC	NATIONAL FINANCIAL SERVICES LL	7,887,828
14	JMPT	JUMP TRADING, LLC	6,940,930
15	GEBB	GLOBAL EXECUTION BROKERS, LP	6,322,701
16	JPMS	J.P. MORGAN SECURITIES INC.	5,931,549
17	NITE	VIRTU AMERICAS LLC	5,698,034
18	OLDM	OLD MISSION CAPITAL, LLC	5,410,550
19	NITP	VIRTU AMERICAS LLC	4,869,813
20	GSCS	GOLDMAN, SACHS & CO.	3,973,248
21	SBSH	CITIGROUP GLOBAL MARKETS INC.	3,547,066
22	DCHF	DART EXECUTIONS, LLC	3,454,563
23	VALR		3,177,520
24	ETBE	ELECTRONIC TRANSACTION CLEARING, INC.	3,154,804
25	DBAB	DEUTSCHE BANK SECURITIES INC.	2,927,831
26	GSLT	GOLDMAN SACHS & CO. LLC	2,490,228
27	BKMM	BNY MELLON CAPITAL MARKETS, LLC	2,022,962
28	GTSZ	GTS SECURITIES LLC	1,807,741
29	ETRS	E*TRADE CLEARING LLC	1,804,969
30	HSBC	HSBC SECURITIES (USA) INC.	1,437,229
31	JEFF	JEFFERIES & COMPANY, INC.	1,397,661
32	CPEM	CLEARPOOL EXECUTION SERVICES, LLC	1,322,701
33	DUST		1,161,328
34	ITGI	ITG INC.	1,044,359
35	QLBR		1,024,535
36	DFIN	ELECTRONIC BROKERAGE SYSTEMS, LLC	1,016,675
37	WEXM	WOLVERINE EXECUTION SERVICES, LLC	981,812
38	SPDR	SPEEDROUTE LLC	976,854
39	CMTT	CMT TRADING LLC	967,612
40	WCHV	WELLS FARGO SECURITIES, LLC	930,192
41	FRET	FOX RIVER EXECUTION TECHNOLOGY, LLC	867,723
42	SUNI	SUN TRADING, LLC	830,308
43	OHOS	TWO SIGMA SECURITIES, LLC	797,052
44	INJX	INSTINET, LLC	563,781
45	WPX	WHITE BAY PT LLC	438,288
46	SSIC	SCOTTRADE, INC.	431,830
47	BERN	SANFORD C. BERNSTEIN AND CO. I	422,696
48	WEXX	WOLVERINE EXECUTION SERVICES,	413,285
49	FOXB		394,869
50	NQRB	BRUT, LLC	362,673

Exhibit 7**Deutsche Bank AG****Market Maker Activity from 3/2017 to 9/2020**

Source: Bloomberg (DB US Equity <GO>, BAS <GO>)

Number	Code	Market Maker	Volume
51	ETEJ	ELECTRONIC TRANSACTION CLEARING, INC.	352,263
52	LSCI	LEK SECURITIES CORPORATION	330,534
53	CHAS	CHARLES SCHWAB AND CO. INC.	310,491
54	GTSW		303,469
55	LIWA	LIME BROKERAGE LLC	289,749
56	CPEX	CLEARPOOL EXECUTION SERVICES	285,267
57	CTLR	CUTLER GROUP, LP	268,040
58	BNCH	THE BENCHMARK COMPANY, LLC	265,916
59	PDQM	PDQ ATS. INC.	258,877
60	LIWW	LIME BROKERAGE LLC	233,624
61	DRWC		231,168
62	MLZC	ERRILL LYNCH, PIERCE, FENNER & SMITH INCORP	203,623
63	WSEA	WOLVERINE SECURITIES	185,887
64	WEDB	WEDBUSH MORGAN SECURITIES INC.	150,252
65	CSEC	COUNTRYWIDE SECURITIES CORP	147,917
66	KBWI	KEEFE BRUYETTE AND WOODS INC.	136,124
67	BAYT	BAYPOINT TRADING LLC	134,400
68	ETDX	ELECTRONIC TRANSACTION CLEARING, INC.	128,996
69	JONE	JONES AND ASSOCIATES INC.	127,217
70	TMBR	TIMBER HILL LLC	120,571
71	CODA		117,592
72	JNST		93,845
73	LIWE	LIME BROKERAGE LLC	78,988
74	BZYD	GOLDMAN SACHS EXECUTION & CLEARING, L.P.	66,440
75	DRWK		66,363
76	COWN	COWEN & CO., LLC	63,306
77	ETBT	ELECTRONIC TRANSACTION CLEARING, INC.	38,024
78	NEFO	NEWEDGE USA, LLC	37,091
79	ADAM	CANACCORD GENUITY INC	37,000
80	DEGS	DART EXECUTIONS, LLC	36,877
81	ARXS	ARXIS SECURITIES LLC	35,128
82	CPET	CLEARPOOL EXECUTION SERVICES, LLC	34,675
83	PERT	PERSHING TRADING COMPANY L.P.	34,396
84	ETBA	ELECTRONIC TRANSACTION CLEARING, INC.	33,906
85	VNDM	VANDHAM SECURITIES CORP.	32,305
86	ETFH		32,000
87	OTAA	OTA LLC	27,859
88	ETDR	ELECTRONIC TRANSACTION CLEARING, INC.	27,456
89	HAPX	HAP TRADING, LLC	27,065
90	HPPO	POTAMUS TRADING, LLC	25,937
91	IMPC	IMPERIAL CAPITAL LLC	25,000
92	MUFG		21,890
93	BTIG	BTIG, LLC	20,434
94	BAYS	BAYES CAPITAL LLC	20,078
95	GARC	GARBAN CORPORATES LLC	20,000
96	WABR	WALL STREET ACCESS	19,600
97	GLPX	ACS EXECUTION SERVICES, LLC	19,500
98	ETFO		17,150
99	DBUL	DEUTSCHE BANK SECURITIES INC.	16,864
100	FILL	TRADESTATION SECURITIES, INC.	16,276

Exhibit 7**Deutsche Bank AG****Market Maker Activity from 3/2017 to 9/2020**

Source: Bloomberg (DB US Equity <GO>, BAS <GO>)

Number	Code	Market Maker	Volume
101	ROTH	ROTH CAPITAL PARTNERS, LLC	15,306
102	CTDL	CITADEL DERIVATIVES GROUP LLC	15,224
103	JOTA	JUMP TRADING	13,875
104	MAXM	MAXIM GROUP, LLC	13,500
105	EGXW	BATS TRADING, INC.	12,987
106	AGIS	AEGIS CAPITAL CORP.	12,950
107	SAGL	SAGETRADER, LLC	12,681
108	LIWD	LIME BROKERAGE LLC	12,463
109	PICT	PICTET OVERSEAS INC.	12,042
110	STFL	STIFEL NICOLAUS	10,437
111	VIEW	VIEWTRADE SECURITIES, INC.	10,084
112	LTCO	LADENBURG, THALMANN & CO. INC.	10,000
113	SPHN	STEPHENS INC.	10,000
114	ETCC	ELECTRONIC TRANSACTION CLEARING, INC.	6,500
115	EGAW	BATS TRADING, INC.	5,767
116	PUMA	PUMA CAPITAL, LLC	5,200
117	ONEL	WILLIAM O'NEIL & COMPANY	3,500
118	BNPX	BNP PARIBAS SECURITIES CORP.	2,900
119	NATL	NATIONAL SECURITIES CORP.	2,800
120	BMOC	BMO CAPITAL MARKETS	2,601
121	MKMP	MKM PARTNERS	2,156
122	ASCM	ASCENDANT CAPITAL MARKETS, LLC	2,000
123	MICA	SPARTAN SECURITIES GROUP LTD	2,000
124	PATH	BENJAMIN & JEROLD BROKERAGE I, LLC	1,900
125	CANT	CANTOR FITZGERALD & CO.	1,802
126	XCAP	XAMBALA CAPITAL, LLC	800
127	GLED	GLENDALE SECURITIES, INC.	700
128	ETFA	ELECTRONIC TRANSACTION CLEARING, INC.	640
129	FLTU	FLOW TRADERS US LLC	594
130	LIWK	LIME BROKERAGE LLC	576
131	SAGC	SAGETRADER, LLC	400
132	LAMP	LAMPOST CAPITAL LLC	300
133	IEQY	CITADEL SECURITIES LLC	200
134	PBON	PREBON FINANCIAL PRODUCTS INC.	200
135	MBTS	MB TRADING	20

Exhibit 8A**Deutsche Bank AG****US Market Short Interest as a Percentage of Float**

Date	US Short Interest vs. Float Ratio
3/15/2017	3.80%
3/31/2017	3.80%
4/13/2017	3.80%
4/28/2017	3.80%
5/15/2017	3.90%
5/31/2017	4.00%
6/15/2017	4.00%
6/30/2017	4.00%
7/14/2017	4.00%
7/31/2017	3.90%
8/15/2017	4.00%
8/31/2017	4.10%
9/15/2017	4.10%
9/29/2017	4.00%
10/13/2017	4.00%
10/31/2017	3.90%
11/15/2017	4.00%
11/30/2017	4.00%
12/15/2017	3.90%
12/29/2017	3.70%
1/12/2018	3.80%
1/31/2018	3.80%
2/15/2018	3.80%
2/28/2018	3.80%
3/15/2018	3.90%
3/29/2018	3.90%
4/13/2018	3.90%
4/30/2018	3.90%
5/15/2018	3.90%
5/31/2018	3.90%
6/15/2018	4.00%
6/29/2018	3.90%
7/13/2018	3.90%
7/31/2018	3.80%
8/15/2018	3.80%
8/31/2018	3.80%
9/14/2018	3.80%
9/28/2018	3.90%
10/15/2018	3.90%
10/31/2018	3.90%
11/15/2018	3.90%
11/30/2018	3.90%
12/14/2018	3.80%
12/31/2018	3.90%
1/15/2019	3.90%
1/31/2019	3.80%
2/15/2019	3.80%
2/28/2019	3.80%

Exhibit 8A**Deutsche Bank AG****US Market Short Interest as a Percentage of Float**

Date	US Short Interest vs. Float Ratio
3/15/2019	3.90%
3/29/2019	3.90%
4/15/2019	3.80%
4/30/2019	3.70%
5/15/2019	3.80%
5/31/2019	3.90%
6/14/2019	3.90%
6/28/2019	4.00%
7/15/2019	4.00%
7/31/2019	4.00%
8/15/2019	4.20%
8/30/2019	4.20%
9/13/2019	4.10%
9/30/2019	4.20%
10/15/2019	4.20%
10/31/2019	4.20%
11/15/2019	4.20%
11/29/2019	4.20%
12/13/2019	4.10%
12/31/2019	4.10%
1/15/2020	4.10%
1/31/2020	4.10%
2/14/2020	4.00%
2/28/2020	4.00%
3/13/2020	4.20%
3/31/2020	3.90%
4/15/2020	3.90%
4/30/2020	4.00%
5/15/2020	4.00%
5/29/2020	3.90%
6/15/2020	3.80%
6/30/2020	3.90%
7/15/2020	3.80%
7/31/2020	3.70%
8/14/2020	3.60%
8/31/2020	3.60%
9/15/2020	3.60%
Average:	3.92%

Source: Bloomberg Short Interest vs. Float Ratio for Total US Market (SFUSTOTL)
Index

Exhibit 8B**Deutsche Bank AG****Short Interest**

Source: Bloomberg

Date	Short Interest	Change In Short Interest	Shares Outstanding	Float ¹	Short Interest as % of:	
					Shares Outstanding	Float
3/15/2017	43,549,077		1,544,854,000	1,544,731,446	2.82%	2.82%
3/31/2017	42,074,908	(1,474,169)	1,379,273,000	1,379,069,499	3.05%	3.05%
4/13/2017	25,459,546	(16,615,362)	2,066,773,000	2,066,569,499	1.23%	1.23%
4/28/2017	21,076,933	(4,382,613)	2,066,773,000	2,066,569,499	1.02%	1.02%
5/15/2017	21,676,519	599,586	2,066,773,000	2,066,569,499	1.05%	1.05%
5/31/2017	25,096,300	3,419,781	2,066,773,000	2,066,569,499	1.21%	1.21%
6/15/2017	23,922,060	(1,174,240)	2,066,773,000	2,066,569,499	1.16%	1.16%
6/30/2017	22,346,889	(1,575,171)	2,066,773,000	2,066,569,499	1.08%	1.08%
7/14/2017	21,937,560	(409,329)	2,066,773,000	2,066,569,499	1.06%	1.06%
7/31/2017	24,562,229	2,624,669	2,066,773,000	2,066,569,499	1.19%	1.19%
8/15/2017	34,910,996	10,348,767	2,066,773,000	2,066,569,499	1.69%	1.69%
8/31/2017	39,964,187	5,053,191	2,066,773,000	2,066,569,499	1.93%	1.93%
9/15/2017	43,679,039	3,714,852	2,066,773,000	2,066,569,499	2.11%	2.11%
9/29/2017	44,469,087	790,048	2,066,773,000	2,066,569,499	2.15%	2.15%
10/13/2017	40,649,134	(3,819,953)	2,066,773,000	2,066,569,499	1.97%	1.97%
10/31/2017	45,965,288	5,316,154	2,066,773,000	2,066,569,499	2.22%	2.22%
11/15/2017	43,214,144	(2,751,144)	2,066,773,000	2,066,569,499	2.09%	2.09%
11/30/2017	40,111,887	(3,102,257)	2,066,773,000	2,066,569,499	1.94%	1.94%
12/15/2017	35,167,409	(4,944,478)	2,066,773,000	2,066,569,499	1.70%	1.70%
12/29/2017	32,827,145	(2,340,264)	2,066,773,000	2,066,449,519	1.59%	1.59%
1/12/2018	36,157,184	3,330,039	2,066,773,000	2,066,449,519	1.75%	1.75%
1/31/2018	29,916,899	(6,240,285)	2,066,773,000	2,066,449,519	1.45%	1.45%
2/15/2018	36,902,218	6,985,319	2,066,773,000	2,066,449,519	1.79%	1.79%
2/28/2018	35,508,985	(1,393,233)	2,066,773,000	2,066,449,519	1.72%	1.72%
3/15/2018	35,970,429	461,444	2,066,773,000	2,066,449,519	1.74%	1.74%
3/29/2018	40,303,065	4,332,636	2,066,773,000	2,066,449,519	1.95%	1.95%
4/13/2018	39,324,503	(978,562)	2,066,773,000	2,066,449,519	1.90%	1.90%
4/30/2018	39,360,065	35,562	2,066,773,000	2,066,449,519	1.90%	1.90%
5/15/2018	37,672,176	(1,687,889)	2,066,773,000	2,066,449,519	1.82%	1.82%
5/31/2018	67,943,892	30,271,716	2,066,773,000	2,066,449,519	3.29%	3.29%
6/15/2018	70,832,148	2,888,256	2,066,773,000	2,066,449,519	3.43%	3.43%
6/29/2018	72,332,965	1,500,817	2,066,773,000	2,066,449,519	3.50%	3.50%

Exhibit 8B**Deutsche Bank AG****Short Interest**

Source: Bloomberg

Date	Short Interest	Change In Short Interest	Shares Outstanding	Float ¹	Short Interest as % of:	
					Shares Outstanding	Float
7/13/2018	74,086,046	1,753,081	2,066,773,000	2,066,449,519	3.58%	3.59%
7/31/2018	75,837,271	1,751,225	2,066,773,000	2,066,449,519	3.67%	3.67%
8/15/2018	84,349,222	8,511,951	2,066,773,000	2,066,449,519	4.08%	4.08%
8/31/2018	80,975,495	(3,373,727)	2,066,773,000	2,066,449,519	3.92%	3.92%
9/14/2018	79,142,328	(1,833,167)	2,066,773,000	2,066,449,519	3.83%	3.83%
9/28/2018	62,136,721	(17,005,607)	2,066,773,000	2,066,449,519	3.01%	3.01%
10/15/2018	61,780,716	(356,005)	2,066,773,000	2,066,449,519	2.99%	2.99%
10/31/2018	66,700,757	4,920,041	2,066,773,000	2,066,449,519	3.23%	3.23%
11/15/2018	71,790,641	5,089,884	2,066,773,000	2,066,449,519	3.47%	3.47%
11/30/2018	57,218,091	(14,572,550)	2,066,773,000	2,066,449,519	2.77%	2.77%
12/14/2018	56,705,113	(512,978)	2,066,773,000	2,066,449,519	2.74%	2.74%
12/31/2018	55,266,078	(1,439,035)	2,066,773,000	2,066,449,519	2.67%	2.67%
1/15/2019	53,857,250	(1,408,828)	2,066,773,000	2,066,449,519	2.61%	2.61%
1/31/2019	46,411,476	(7,445,774)	2,066,773,000	2,066,449,519	2.25%	2.25%
2/15/2019	54,502,643	8,091,167	2,066,773,000	2,066,449,519	2.64%	2.64%
2/28/2019	52,426,852	(2,075,791)	2,066,773,000	2,066,449,519	2.54%	2.54%
3/15/2019	51,771,702	(655,150)	2,066,773,000	2,066,449,519	2.50%	2.51%
3/29/2019	50,314,457	(1,457,245)	2,066,773,000	2,066,151,904	2.43%	2.44%
4/15/2019	51,886,663	1,572,206	2,066,773,000	2,066,151,904	2.51%	2.51%
4/30/2019	49,475,609	(2,411,054)	2,066,773,000	2,066,151,904	2.39%	2.39%
5/15/2019	59,675,363	10,199,754	2,066,773,000	2,066,151,904	2.89%	2.89%
5/31/2019	66,810,401	7,135,038	2,066,773,000	2,066,151,904	3.23%	3.23%
6/14/2019	57,966,133	(8,844,268)	2,066,773,000	2,066,151,904	2.80%	2.81%
6/28/2019	57,435,870	(530,263)	2,066,773,000	2,066,151,904	2.78%	2.78%
7/15/2019	69,137,911	11,702,041	2,066,773,000	2,066,151,904	3.35%	3.35%
7/31/2019	73,707,028	4,569,117	2,066,773,000	2,066,151,904	3.57%	3.57%
8/15/2019	82,934,865	9,227,837	2,066,773,000	2,066,151,904	4.01%	4.01%
8/30/2019	89,030,344	6,095,479	2,066,773,000	2,066,151,904	4.31%	4.31%
9/13/2019	76,965,519	(12,064,825)	2,066,773,000	2,066,151,904	3.72%	3.73%
9/30/2019	72,750,182	(4,215,337)	2,066,773,000	2,066,247,414	3.52%	3.52%
10/15/2019	74,779,722	2,029,540	2,066,773,000	2,066,247,414	3.62%	3.62%
10/31/2019	69,729,116	(5,050,606)	2,066,773,000	2,066,247,414	3.37%	3.37%

Exhibit 8B**Deutsche Bank AG****Short Interest**

Source: Bloomberg

Date	Short Interest	Change In Short Interest	Shares Outstanding	Float ¹	Short Interest as % of:	
					Shares Outstanding	Float
11/15/2019	71,721,345	1,992,229	2,066,773,000	2,066,247,414	3.47%	3.47%
11/29/2019	69,442,421	(2,278,924)	2,066,773,000	2,066,247,414	3.36%	3.36%
12/13/2019	69,834,129	391,708	2,066,773,000	2,066,247,414	3.38%	3.38%
12/31/2019	68,231,102	(1,603,027)	2,066,773,000	2,066,247,414	3.30%	3.30%
1/15/2020	52,926,392	(15,304,710)	2,066,773,000	2,066,247,414	2.56%	2.56%
1/31/2020	56,885,138	3,958,746	2,066,773,000	2,066,247,414	2.75%	2.75%
2/14/2020	62,441,564	5,556,426	2,066,773,000	2,066,247,414	3.02%	3.02%
2/28/2020	65,752,136	3,310,572	2,066,773,000	2,066,247,414	3.18%	3.18%
3/13/2020	86,659,946	20,907,810	2,066,773,000	2,066,247,414	4.19%	4.19%
3/31/2020	75,574,382	(11,085,564)	2,066,773,000	2,048,463,108	3.66%	3.69%
4/15/2020	76,026,532	452,150	2,066,773,000	2,048,463,108	3.68%	3.71%
4/30/2020	79,193,299	3,166,767	2,066,773,000	2,048,463,108	3.83%	3.87%
5/15/2020	78,356,059	(837,240)	2,066,773,000	2,048,463,108	3.79%	3.83%
5/29/2020	72,081,623	(6,274,436)	2,066,773,000	2,048,463,108	3.49%	3.52%
6/15/2020	60,263,035	(11,818,588)	2,066,773,000	2,048,463,108	2.92%	2.94%
6/30/2020	59,457,359	(805,676)	2,066,773,000	2,048,463,108	2.88%	2.90%
7/15/2020	55,728,588	(3,728,771)	2,066,773,000	2,048,463,108	2.70%	2.72%
7/31/2020	56,034,454	305,866	2,066,773,000	2,048,463,108	2.71%	2.74%
8/14/2020	56,324,866	290,412	2,066,773,000	2,048,463,108	2.73%	2.75%
8/31/2020	54,952,284	(1,372,582)	2,066,773,000	2,048,463,108	2.66%	2.68%
9/15/2020	55,103,757	151,473	2,066,773,000	2,048,463,108	2.67%	2.69%
Average:	55,122,740	137,556	2,052,544,541	2,049,639,025	2.69%	2.69%
Minimum:	21,076,933	(17,005,607)	1,379,273,000	1,379,069,499	1.02%	1.02%
Maximum:	89,030,344	30,271,716	2,066,773,000	2,066,569,499	4.31%	4.31%

[1] Float is equal to shares outstanding less insider holdings.

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Achleitner (Paul)	0	0	0	0	0	0	0	0	0	0	0
Blomeyer-Bartenstein (Ludwig)	0	0	0	0	0	0	0	0	0	3,337	3,337
Campelli (Fabrizio)	0	0	0	0	0	0	0	0	0	0	0
Carroll Clark (Mayree)	0	0	0	0	0	0	0	0	0	40,000	40,000
Klee (Martina)	1,367	1,479	1,479	1,479	2,328	2,328	2,328	2,328	2,328	2,442	2,442
Kuhnke (Frank)	0	0	0	0	0	0	0	0	0	7,094	7,094
Leukert (Bernd)	0	0	0	0	0	0	0	0	0	0	0
Lewis (Stuart Wilson)	51,347	51,347	51,347	51,347	88,292	88,292	88,292	88,292	88,292	103,561	103,561
Mark (Henriette)	1,006	1,016	1,016	1,016	1,524	1,524	1,524	1,524	1,524	1,524	1,524
Platscher (Gabriele)	1,060	1,103	1,103	1,103	1,293	1,293	1,293	1,293	1,293	1,365	1,365
Polaschek (Detlef)	0	0	0	0	0	0	0	0	0	553	553
Riley (Christiana)	0	0	0	0	0	0	0	0	0	0	0
Ritchie (Garth)	28,778	28,778	28,778	28,778	43,227	43,227	43,227	43,227	43,227	84,738	84,738
Schuetz (Gerd Alexander)	0	0	0	0	0	0	0	0	0	0	0
Sewing (Christian)	36,249	36,249	36,249	36,249	54,356	54,356	54,356	54,356	54,356	73,237	73,237
Steinmüller (Werner)	0	79,792	79,792	79,792	119,688	119,688	119,688	119,688	119,688	146,905	146,905
Strauß (Frank)	0	0	0	0	7,172	7,172	7,172	7,172	7,172	10,772	10,772
Thain (John A)	0	0	0	0	0	0	0	0	0	100,000	100,000
Trogni (Michele Louise)	0	0	0	0	0	0	0	0	0	15,000	15,000
von Moltke (James)	0	0	0	0	0	0	0	0	0	24,967	24,967
von Rohr (Karl)	2,747	3,737	3,737	3,737	5,601	5,601	5,601	5,601	5,601	5,601	5,601
1741 Fund Solutions AG	8,400	0	0	0	0	0	0	0	0	0	0
1832 Asset Management L P	0	0	0	0	0	0	0	0	0	0	0
1919 Investment Counsel, LLC	0	0	0	0	0	0	0	0	0	0	0
361 Capital LLC_ NLE	7,268	1,074	0	0	0	0	0	5,565	0	0	0
a s r vermogensbeheer	0	0	0	0	0	0	0	161,109	191,728	191,728	276,984
AAB Investment GmbH_ NLE	3,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	0	0
Abante Asesores Gestión, S G I I C , S A	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	110,000	0	0
Abeille Asset Management SA	780,644	789,736	1,184,355	1,194,617	0	1,158,674	1,137,896	1,144,896	1,127,564	1,107,637	1,063,344
Aberdeen Asset Investments Limited	92,724	10,464	10,464	5,278	5,169	3,603	3,525	0	0	0	0
Aberdeen Asset Managers Ltd	0	8,513	4,256	4,256	4,256	0	0	0	0	0	0
Aberdeen Standard Investments (Edinburgh)	0	0	0	3,077,670	6,360,223	6,384,641	3,879,890	142,028	0	0	0
ABN AMRO Investment Solutions (AAIS)	75,620	53,256	73,840	71,400	63,613	76,994	63,522	45,076	47,136	46,253	46,600
abrdn Asia Limited	0	0	0	26,063	22,576	166,812	483,027	259,932	259,932	41,089	46,332
ACA Asset management Company & Associés	0	0	0	0	0	5,500	0	0	0	0	0
Acadian Asset Management LLC	993,285	1,128,063	18,321	0	0	0	0	0	0	0	0
ACATIS Investment Kapitalverwaltungsgesellschaft GmbH	416,000	366,000	573,500	401,000	401,000	471,000	471,000	331,000	331,000	0	0
Accuro Asset Management AG	0	0	6,000	6,000	13,600	13,600	0	0	0	0	0
Accuro Investment Services AG	10,500	10,500	10,500	10,500	0	0	0	0	0	0	0
Achmea Investment Management B V	0	0	0	0	0	0	0	0	0	0	0
AcomeA SGR S p A	0	0	1,500	5,000	4,000	0	0	0	0	0	0
Acrospire Investment Management LLC_ NLE	0	2,237	0	0	0	0	0	0	0	0	0
ACTIAM N V	400,850	390,922	445,437	590,736	584,376	603,383	576,364	696,909	732,441	847,906	821,307
Actinver Wealth Management, Inc	0	0	0	0	0	0	0	0	0	0	0
ActiGest S A	0	18,400	27,600	27,600	27,600	23,000	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Achleitner (Paul)	0	0	145,000	145,000	145,000	145,000
Blomeyer-Bartenstein (Ludwig)	3,337	3,337	3,521	3,521	3,521	3,521
Campelli (Fabrizio)	0	0	50,417	50,417	50,417	50,417
Carroll Clark (Mayree)	40,000	40,000	67,776	67,776	67,776	67,776
Klee (Martina)	2,442	2,442	2,452	2,452	2,452	2,452
Kuhnke (Frank)	7,094	7,094	15,407	15,407	15,407	15,407
Leukert (Bernd)	0	0	1,500	1,500	1,500	1,500
Lewis (Stuart Wilson)	103,561	103,561	145,743	145,743	145,743	145,743
Mark (Henriette)	1,524	1,524	1,524	1,524	1,524	1,524
Platscher (Gabriele)	1,365	1,365	1,460	1,460	1,460	1,460
Polaschek (Detlef)	553	553	602	602	602	602
Riley (Christiana)	0	0	43,907	43,907	43,907	43,907
Ritchie (Garth)	0	0	0	0	0	0
Schuetz (Gerd Alexander)	0	0	17,360,894	17,360,894	17,360,894	17,360,894
Sewing (Christian)	73,237	73,237	114,892	114,892	114,892	114,892
Steinmüller (Werner)	146,905	146,905	174,035	174,035	174,035	174,035
Strauß (Frank)	0	0	0	0	0	0
Thain (John A)	100,000	100,000	100,000	100,000	100,000	100,000
Trogni (Michele Louise)	15,000	15,000	15,000	15,000	15,000	15,000
von Moltke (James)	24,967	24,967	55,959	55,959	55,959	55,959
von Rohr (Karl)	5,601	5,601	9,803	9,803	9,803	9,803
1741 Fund Solutions AG	0	0	0	0	0	0
1832 Asset Management L P	0	725	725	725	725	725
1919 Investment Counsel, LLC	0	0	375	375	0	0
361 Capital LLC_ NLE	0	0	0	0	0	0
a s r vermogensbeheer	274,768	286,965	326,062	330,320	345,337	353,501
AAB Investment GmbH_ NLE	0	0	0	0	0	0
Abante Asesores Gestión, S G I I C , S A	0	0	0	0	0	0
Abeille Asset Management SA	1,043,419	0	0	0	0	0
Aberdeen Asset Investments Limited	4,396	6,925	16,994	21,933	26,518	56,026
Aberdeen Asset Managers Ltd	0	0	0	0	0	0
Aberdeen Standard Investments (Edinburgh)	0	0	0	0	0	0
ABN AMRO Investment Solutions (AAIS)	34,933	39,050	43,871	48,723	48,626	48,703
abrdn Asia Limited	18,710	15,653	26,383	11,222	25,034	0
ACA Asset management Company & Associés	0	0	0	0	0	0
Acadian Asset Management LLC	0	0	0	16,374	46,557	1,946,381
ACATIS Investment Kapitalverwaltungsgesellschaft GmbH	0	0	0	0	0	0
Accuro Asset Management AG	0	0	0	0	0	0
Accuro Investment Services AG	0	0	0	0	0	0
Achmea Investment Management B V	0	0	147,454	417,269	118,674	255,275
AcomeA SGR S p A	0	0	0	0	0	0
Acrospire Investment Management LLC_ NLE	0	0	0	0	0	0
ACTIAM N V	780,327	782,159	714,111	65,872	0	0
Actinver Wealth Management, Inc	0	0	0	38,208	21,037	0
ActivGest S A	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41.0%	51.7%	46.2%	46.6%	49.6%	45.8%	44.0%	50.7%	49.0%	43.4%	45.3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Adepa Asset Management S A	16,600	16,600	0	0	0	0	0	0	0	0	0
Advent Capital Management, LLC	0	0	0	0	120,000	0	0	0	0	0	0
Advisor Group, Inc	9,812	8,875	14,821	14,368	13,452	15,655	12,929	11,977	14,271	5,301	4,661
Advisor Partners, LLC	0	0	0	0	0	0	0	0	0	0	0
AdvisorNet Wealth Management	0	0	0	0	0	0	3,000	3,000	2,500	2,500	2,500
Advisory Invest GmbH	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Advisory Services Network, LLC	0	303	503	508	205	0	0	0	0	0	542
Aegon Asset Management Ltd	0	0	0	0	0	0	0	28,913	0	593	0
AEGON Investment Management B V	424,289	338,036	449,549	458,645	417,761	411,064	397,323	370,054	381,594	369,508	363,622
AG2R La Mondiale Gestion d'Actifs SA	0	0	0	0	550,000	550,000	760,000	760,000	612,871	612,871	612,871
Agevis GmbH	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	0	0
Agincourt Capital Management, L L C	0	0	0	0	0	0	0	0	0	0	7,090
AIFM Capital AB	0	0	0	0	0	0	0	0	0	0	0
AIPM Azur International Portfolio Management AG	0	0	112,000	112,000	0	0	0	0	0	7,500	0
Al Thani (Sheikh Hamad Bin Jassim Bin Jabor)	42,069,382	42,069,382	42,069,382	63,036,580	63,036,580	63,036,580	63,036,580	63,036,580	63,036,580	63,036,580	63,036,580
Al Thani (Sheikh Hamad Bin Khalifa)	42,069,382	42,069,382	42,069,382	63,036,580	63,036,580	63,036,580	63,036,580	63,036,580	63,036,580	63,036,580	63,036,580
Ålandsbanken Asset Management Ab	45,444	10,000	15,000	70,000	17,000	17,000	0	0	0	0	0
Alden Global Capital Ltd	0	0	0	0	0	0	0	0	229,000	0	0
Alean (Capital) Anstalt	20,000	20,000	20,000	20,000	20,000	20,000	30,000	30,000	0	0	0
Alera Investment Advisors, LLC	0	0	0	0	0	0	0	0	952	1,168	0
Aletti Gestielle SGR S p A NLE	0	0	0	0	0	61,000	61,000	61,000	110,760	0	0
Alfred Berg Kapitalforvaltning AB	0	0	0	0	0	0	0	0	0	0	0
Algebris (UK) Limited	0	0	0	0	0	0	0	0	0	0	505,214
AllianceBernstein L P	818,650	823,498	1,114,059	1,074,455	1,293,726	1,377,600	1,300,156	657,759	742,251	690,745	692,621
Allianz Global Investors France	44,850	44,850	0	0	150,000	150,000	150,000	20,000	20,000	20,000	20,000
Allianz Global Investors GmbH	3,764,655	2,214,651	1,846,908	1,385,857	1,754,645	1,908,802	1,764,160	1,346,233	1,363,567	989,376	184,388
Allianz Global Investors U S LLC	0	0	0	0	0	0	0	0	0	0	0
Allianz Invest Kapitalanlagegesellschaft mbH	25,000	50,000	0	0	0	0	0	0	0	192,000	0
Allspring Global Investments, LLC	34,474	27,646	38,731	36,015	9,182	2,304	0	0	0	0	0
Alm Brand Asset Management	87,350	76,650	0	0	0	0	0	0	0	9,700	9,700
Alphamark Advisors, LLC	0	0	0	0	0	0	0	0	0	0	1,500
AlphaOne Capital Partners, LLC NLE	0	0	49,300	0	0	0	0	0	0	0	0
Alpine Global Management, LLC	0	117,091	25,000	0	0	0	0	0	0	0	0
Alpine Group USVI, LLC	0	0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	0
Alps Advisors, Inc	2,616	3,033	3,580	4,186	3,781	5,268	7,194	6,829	9,574	9,574	9,574
Alte Leipziger Trust Investment-Gesellschaft mbH	423,859	420,705	34,056	202,882	460,905	499,198	504,247	271,956	277,214	53,291	270,947
ALTKÖNIG Asset Management GmbH	0	0	0	0	0	0	0	54,000	54,000	58,000	58,000
Altus Wealth Group LLC	0	0	0	0	0	0	0	0	0	0	0
American Century Investment Management, Inc	282,699	253,964	277,261	172,111	172,111	172,111	172,111	8,364	12,271	12,653	15,381
American Financial Group, Inc	160,000	239,999	239,999	239,999	164,999	164,999	164,999	164,999	164,999	164,999	164,999
American Red Cross	18,685	18,685	18,685	18,685	18,685	18,685	18,685	18,685	0	0	0
AMF Tjänstepension AB	0	0	439	0	0	0	0	0	0	0	0
Amici Capital, LLC NLE	5,000	0	0	0	0	0	0	0	0	0	0
AMP Capital Investors Limited	467,506	563,620	824,791	764,363	707,155	730,013	689,404	660,090	624,130	646,888	646,888
Ampega Asset Management GmbH	15,000	15,000	15,000	15,000	15,000	15,000	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Adepa Asset Management S A	0	0	0	0	0	0
Advent Capital Management, LLC	0	0	0	0	0	0
Advisor Group, Inc	4,581	3,781	3,781	30,564	30,597	4,819
Advisor Partners, LLC	0	0	0	0	0	10,797
AdvisorNet Wealth Management	2,500	2,500	2,500	2,900	2,900	2,600
Advisory Invest GmbH	0	0	0	0	0	0
Advisory Services Network, LLC	542	510	772	0	1,907	150
Aegon Asset Management Ltd	44,041	0	0	0	0	0
AEGON Investment Management B V	367,334	345,718	339,181	341,710	339,724	264,404
AG2R La Mondiale Gestion d'Actifs SA	612,871	612,871	679,120	679,120	679,120	679,120
Agevis GmbH	0	0	0	0	0	0
Agincourt Capital Management, L L C	7,363	7,363	4,983	4,983	4,983	4,983
AIFM Capital AB	0	0	0	0	0	336
AIPM Azur International Portfolio Management AG	0	0	0	0	0	0
Al Thani (Sheikh Hamad Bin Jassim Bin Jabor)	63,036,580	63,036,580	63,036,580	63,036,580	63,036,580	63,036,580
Al Thani (Sheikh Hamad Bin Khalifa)	63,036,580	63,036,580	63,036,580	63,036,580	63,036,580	63,036,580
Alandsbanken Asset Management Ab	0	0	0	0	0	0
Alden Global Capital Ltd	0	0	0	0	0	0
Alean (Capital) Anstalt	0	0	0	0	0	0
Alera Investment Advisors, LLC	0	0	0	0	0	0
Aletti Gestielle SGR S p A NLE	0	0	0	0	0	0
Alfred Berg Kapitalforvaltning AB	0	0	0	0	25,000	25,000
Algebris (UK) Limited	0	0	0	0	0	0
AllianceBernstein L P	685,613	679,673	843,771	712,428	718,723	673,335
Allianz Global Investors France	20,000	20,000	20,000	0	0	0
Allianz Global Investors GmbH	531,988	196,185	138,535	295,439	284,119	845,376
Allianz Global Investors U S LLC	0	0	0	0	0	62,310
Allianz Invest Kapitalanlagegesellschaft mbH	0	0	85,000	0	0	0
Allspring Global Investments, LLC	0	0	0	0	31,985	784,717
Alm Brand Asset Management	12,738	12,738	13,253	13,820	13,820	14,239
Alphamark Advisors, LLC	1,500	1,500	1,500	1,500	1,500	1,500
AlphaOne Capital Partners, LLC NLE	0	0	0	0	0	0
Alpine Global Management, LLC	0	0	0	0	0	0
Alpine Group USVI, LLC	0	0	0	0	0	0
Alps Advisors, Inc	9,574	9,574	9,574	9,574	9,574	0
Alte Leipziger Trust Investment-Gesellschaft mbH	471,277	107,273	103,432	396,941	396,941	447,066
ALTKONIG Asset Management GmbH	58,000	58,000	58,000	58,000	58,000	58,000
Altus Wealth Group LLC	0	0	0	0	0	300
American Century Investment Management, Inc	15,381	20,170	46,236	63,826	76,273	94,857
American Financial Group, Inc	164,999	164,999	164,999	164,999	164,999	164,999
American Red Cross	0	0	0	0	0	0
AMF Tjänstepension AB	0	0	0	0	0	0
Amici Capital, LLC NLE	0	0	0	0	0	0
AMP Capital Investors Limited	628,174	628,174	529,519	527,795	553,572	818,880
Ampega Asset Management GmbH	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Ampega Investment GmbH	43,000	43,000	57,000	57,000	65,000	0	325	424	424	396	50,000
Amundi Asset Management, SAS	14,130,105	9,194,803	30,938,218	26,334,464	15,665,862	28,678,592	20,639,989	13,082,394	15,476,681	14,434,055	12,583,027
Amundi Deutschland GmbH	0	124,357	220,035	118,123	0	0	0	0	0	0	0
AMUNDI IBERIA SGIC SA	22,250	22,250	22,250	22,250	208,776	184,976	0	0	0	0	0
Amundi Ireland Limited	37,892	33,920	25,530	25,530	26,553	32,115	32,115	0	0	0	0
Amundi SGR SpA	0	115,416	0	0	0	0	0	0	0	0	0
Analytic Investors, LLC NLE	0	0	11,436	12,582	12,582	12,582	12,582	12,582	0	0	0
Andra AP-Fonden	54,430	65,017	29,714	0	87,852	0	0	0	0	0	0
Andreas Meißner Vermögensmanagement GmbH	72,000	42,000	78,000	78,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
Anima SGR S p A	394,000	394,000	394,000	394,000	7,104	72,824	102,974	70,712	533,220	533,220	533,220
Anthilia Capital Partners SGR Spa	21,000	17,000	20,000	30,000	70,000	55,000	30,000	30,000	30,000	0	0
Aperio Group, LLC	443,833	478,619	548,303	485,002	555,184	643,111	375,545	608,657	636,333	708,347	773,547
APG Asset Management N V	1,236,307	371,517	371,517	371,517	371,517	0	0	0	0	0	0
Apo Asset Management GmbH	21,700	21,700	68,900	58,400	58,350	38,168	39,800	0	0	0	0
AQR Capital Management, LLC	25,795	380,875	1,410,524	791,113	84,877	51,118	50,137	0	0	0	0
Aquila Asset Management ZH AG	0	0	15,000	15,000	15,000	23,000	23,000	23,000	23,000	23,000	23,000
AR Asset Management, Inc	16,000	16,000	12,000	0	0	0	0	0	0	0	0
Aramea Asset Management AG	37,500	37,500	50,000	58,000	70,000	79,000	75,000	85,000	85,000	95,000	45,000
ARCA Fondi SGR S p A	30,633	232,249	691,392	689,093	39,543	39,543	20,440	20,440	11,152	11,152	11,152
AreInvest AG	0	0	0	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150
Arden Asset Management LLC NLE	39,231	0	0	0	0	0	0	0	0	0	0
Ardsley Advisory Partners LP	0	0	0	0	0	0	0	0	0	0	0
Argenta Asset Management SA	34,672	20,552	0	0	0	0	0	0	0	0	0
Arrowgrass Capital Partners (US) LP	0	0	1,000,000	0	0	474,067	0	0	1,225,000	1,110,000	872,827
Arrowstreet Capital, Limited Partnership	0	0	0	0	0	15,708	0	0	675,622	0	0
Artisan Partners Limited Partnership	19,504	19,504	24,062	18,447	18,447	18,447	18,447	18,447	0	14,445	0
ARTS Asset Management GmbH	59,223	15,707	23,256	23,299	23,299	23,299	23,299	21,586	21,563	21,563	23,031
Arxis Securities LLC	396,362	0	0	0	0	0	0	0	0	0	0
Asesores y Gestores Financieros Fondos, SGIC, S A	35,000	35,000	35,000	35,000	35,000	35,000	0	0	0	0	0
Ashburton Fund Managers (Proprietary) Limited	0	0	0	0	0	0	0	0	1,850	1,850	1,850
Assenagon Asset Management S A	30,000	30,000	45,000	45,000	0	0	0	300,000	300,000	300,000	0
Asset Management One Co., Ltd	117,195	117,195	12,107	12,107	12,107	12,107	91,105	91,105	91,105	91,105	91,458
Asset Management Partners AG	10,716	10,716	10,716	10,716	10,716	10,716	10,716	10,716	0	0	0
Asset Plus Fund Management Company Limited	2,832	2,832	2,832	2,832	2,832	2,832	0	0	0	0	0
Assetmark, Inc	0	0	0	80	268	0	0	0	0	0	0
Associated Investment Management, LLC	0	0	0	0	0	0	0	0	0	0	0
Atharor Capital, LP	0	0	0	0	0	0	0	0	0	0	0
Athena Capital Advisors LLC	0	0	0	0	0	0	0	0	0	0	0
Atlas Capital Advisors LLC	0	0	0	0	0	0	0	0	0	0	0
AUA Capital Management, LLC	1,250	1,250	1,875	1,875	1,875	1,875	2,225	2,225	2,225	2,225	2,225
Avestar Capital, LLC	0	0	0	0	0	259	75	199	98	251	98
Aviva Investors Asia Pte Ltd	0	0	0	0	1,158,674	0	0	0	0	0	0
Aviva Investors Global Services Limited	1,180,576	1,198,406	1,803,532	1,510,991	729,716	700,716	673,315	631,087	597,091	611,766	618,448
Aviva Powszechnie Towarzystwo Emerytalne Aviva Santander SA	907,397	907,397	0	0	0	0	0	0	0	0	0
AXA Investment Managers Japan Ltd	0	0	0	0	0	0	0	92,700	92,700	92,700	37,000

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Ampega Investment GmbH	100,000	0	0	0	0	200,000
Amundi Asset Management, SAS	24,063,963	23,956,764	22,029,610	20,829,319	18,795,848	18,192,952
Amundi Deutschland GmbH	0	0	0	0	0	0
AMUNDI IBERIA SGIC SA	0	0	0	0	140,897	0
Amundi Ireland Limited	0	0	0	0	0	22,430
Amundi SGR SpA	0	0	0	0	0	0
Analytic Investors, LLC NLE	0	0	0	0	0	0
Andra AP-Fonden	0	243,544	249,700	586,989	678,931	602,468
Andreas Meißner Vermögensmanagement GmbH	48,000	48,000	48,000	48,000	0	0
Anima SGR S p A	533,220	533,220	533,220	533,220	533,220	33,136
Anthilia Capital Partners SGR Spa	0	0	0	0	0	0
Aperio Group, LLC	923,777	768,715	745,943	904,651	914,544	832,800
APG Asset Management N V	0	0	837,663	827,036	827,036	827,036
Apo Asset Management GmbH	0	0	0	0	0	0
AQR Capital Management, LLC	13,338	13,338	47,949	47,433	182,774	157,693
Aquila Asset Management ZH AG	23,000	23,000	23,000	23,000	23,000	0
AR Asset Management, Inc	0	0	0	0	0	0
Aramea Asset Management AG	45,000	95,000	105,000	95,000	45,000	40,000
ARCA Fondi SGR S p A	11,152	11,152	11,152	11,152	11,152	311,231
AreInvest AG	2,150	2,150	2,150	2,150	2,150	2,150
Arden Asset Management LLC NLE	0	0	0	0	0	0
Ardsley Advisory Partners LP	0	75,000	0	0	0	0
Argenta Asset Management SA	0	0	0	0	0	0
Arrowgrass Capital Partners (US) LP	597,827	0	0	0	0	0
Arrowstreet Capital, Limited Partnership	284,873	0	0	0	0	15,086,079
Artisan Partners Limited Partnership	0	0	0	0	0	0
ARTS Asset Management GmbH	23,031	22,926	22,926	18,704	18,704	19,646
Arcis Securities LLC	0	0	0	0	0	0
Asesores y Gestores Financieros Fondos, SGIC, S A	0	0	0	0	0	0
Ashburton Fund Managers (Proprietary) Limited	1,850	1,850	1,850	1,850	0	0
Assenagon Asset Management S A	0	1,551,239	2,531,942	1,585,458	1,457,794	2,382,683
Asset Management One Co., Ltd	91,458	91,458	91,458	10,759	12,716	12,716
Asset Management Partners AG	0	0	0	0	0	0
Asset Plus Fund Management Company Limited	0	0	0	0	0	0
Assetmark, Inc	0	0	0	0	0	0
Associated Investment Management, LLC	0	0	212	116	0	0
Athnor Capital, LP	0	0	0	0	0	24,677
Athena Capital Advisors LLC	0	0	0	0	5,067	5,067
Atlas Capital Advisors LLC	0	0	37,821	36,711	33,904	30,567
AUA Capital Management, LLC	2,225	2,225	1,475	1,475	1,475	1,475
Avestar Capital, LLC	0	0	0	0	0	0
Aviva Investors Asia Pte Ltd	0	1,010,503	46,341	0	0	0
Aviva Investors Global Services Limited	549,882	540,174	542,078	552,767	561,447	1,742,940
Aviva Powszechnie Towarzystwo Emerytalne Aviva Santander SA	0	0	0	0	0	0
AXA Investment Managers Japan Ltd	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41.0%	51.7%	46.2%	46.6%	49.6%	45.8%	44.0%	50.7%	49.0%	43.4%	45.3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
AXA Investment Managers Paris	0	6,286	0	0	0	0	0	92,700	92,700	92,700	92,700
AXA Investment Managers UK Ltd	249,123	186,124	250,672	278,280	4,500	4,500	1,800	1,800	1,800	1,800	1,800
AXA Rosenberg Investment Management LLC	25,000	176,600	301,200	298,100	276,600	239,200	211,100	154,600	136,300	136,300	50,000
AXA Rosenberg Investment Management Ltd	4,800	40,800	66,700	63,900	63,900	72,500	41,700	53,100	53,100	53,100	53,100
Axiom Investors	0	0	0	0	82,602	0	0	0	0	0	0
Axxion S.A.	49,195	49,195	51,792	51,792	62,792	62,792	21,292	65,292	43,892	43,892	61,092
AZA Capital Management	0	0	0	0	0	23,270	33,551	35,546	35,516	32,675	0
Azimut Capital Management Sgr SpA	63,365	63,365	83,200	83,200	76,500	76,500	0	0	0	0	0
Azimut Investments S.A.	63,365	63,365	83,200	83,200	76,500	76,500	0	0	0	0	0
B Madrid Gestión de Activos S G I I C , S A NLE	1,245	1,245	1,245	1,245	1,245	1,245	1,245	1,245	0	0	0
Baader Bank AG	0	0	0	0	0	0	5,000	10,000	10,000	10,000	0
Bailard, Inc	0	0	0	0	100,000	0	0	0	0	0	0
Baillie Gifford & Co	19,521	90,536	166,467	153,940	115,451	0	0	0	0	0	0
Baird Investment Management	11,642	0	0	0	0	0	0	0	0	0	0
Balentine LLC	0	0	0	0	0	0	0	567	2,289	2,289	2,551
Ballentine Partners, LLC	0	0	0	0	0	0	0	0	0	0	0
Bâloise Asset Management	32,630	32,560	48,926	49,002	8,697	8,686	7,275	6,349	3,910	3,910	5,099
Balyasny Asset Management LP	300,000	0	0	25,302	45,042	0	0	30,309	0	0	0
Banca Credinvest SA	0	61,000	91,500	91,500	0	0	0	0	0	0	0
Banca Finnat Euramerica S p A	11,272	9,515	0	0	0	0	0	0	0	0	0
Banca Popolare di Sondrio (Suisse) S A	17,000	17,000	25,500	25,500	11,000	11,000	11,000	11,000	11,000	11,000	11,000
Banco Santander SA	0	44,634	5,585,638	4,669,101	5,570,712	5,253,124	3,901,783	179,307	93,448	164,415	345,251
Bank Julius Bär & Co AG	0	0	0	0	0	0	0	0	0	0	0
Bank of Montreal Europe PLC	3,100,000	1,700,000	0	0	0	0	0	1,017,300	0	0	0
Bank Vontobel AG (Private Banking)	35,400	35,400	35,400	35,400	0	0	0	0	0	0	0
Bankia Fondos, S G I I C , S A NLE	85,455	85,455	110,432	112,187	96,017	71,017	71,017	107,068	132,077	14,370	14,370
Bankinter Gestión de Activos, SGIIC S A	80,074	80,074	80,074	80,074	80,074	80,074	0	0	0	0	0
Banque Cantonale Vaudoise	0	94,057	94,057	62,420	62,420	62,420	62,420	62,420	62,420	62,420	62,420
Banque de Luxembourg S A	122,000	122,000	0	0	0	0	0	0	0	0	0
Banque Degroof Petercam Luxembourg S A	3,100	3,100	0	0	0	0	0	0	0	0	0
Banque Degroof Petercam N V	12,777	12,777	12,777	0	0	0	0	0	0	0	0
Banque Pictet & Cie S A	0	100,500	86,100	86,100	103,450	1,001,705	1,011,850	1,056,900	546,900	845,600	741,000
Banque Vontobel SA	0	0	0	0	0	0	0	0	0	0	0
Bantleon Bank AG	0	0	0	0	0	15,680	9,544	0	0	0	0
Barclays Bank PLC	0	3,700	225,247	240,230	270,647	661,682	1,438,065	1,363,967	1,534,002	1,471,653	1,926,909
Barclays Capital	316,562	341,658	50,507	248,907	283	98	35,000	0	0	0	10,000
Barclays Capital Inc	2,926	2,926	2,439	9,234	714,339	179,085	729,904	552,893	436,074	705,663	709,784
Barclays Wealth	0	0	0	0	0	0	0	0	0	0	0
Barclays Wealth Managers España, S A , S G I I C	2,700	2,700	2,700	2,700	2,700	2,700	0	0	0	0	0
Barrow, Hanley, Mewhinney & Strauss, LLC	63,257	63,257	63,257	63,257	0	0	0	0	0	0	0
Baumann and Partners S A	0	0	0	0	0	0	17,500	27,500	37,500	37,500	37,500
Bayerische Vermögen AG	0	0	15,000	15,000	5,000	5,000	5,000	5,000	5,000	5,000	0
BayernInvest Kapitalanlagegesellschaft mbH	0	0	0	0	0	0	0	0	0	0	0
Bayesian Capital Management, LP	0	0	0	0	0	0	0	0	0	0	0
BBVA Asset Management, S A , S G I I C	187,319	261,874	270,092	260,586	235,802	312,255	307,394	53,359	513,671	77,903	77,903

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
AXA Investment Managers Paris	92,700	92,700	92,700	92,700	45,102	0
AXA Investment Managers UK Ltd	11,280	11,280	3,071	3,071	2,787	1,406
AXA Rosenberg Investment Management LLC	0	0	0	6,688	64,333	78,838
AXA Rosenberg Investment Management Ltd	53,100	53,100	53,100	53,100	0	0
Axiom Investors	0	0	0	0	0	0
Axxion S A	61,092	80,800	80,800	97,800	97,800	0
AZA Capital Management	0	0	0	0	0	0
Azimut Capital Management Sgr SpA	0	0	0	0	0	0
Azimut Investments S A	0	0	0	0	0	0
B Madrid Gestión de Activos S G I I C , S A NLE	0	0	0	0	0	0
Baader Bank AG	0	0	0	0	0	0
Bailard, Inc	0	0	0	0	0	0
Baillie Gifford & Co	0	0	0	0	0	0
Baird Investment Management	0	0	0	0	0	0
Balentine LLC	1,236	1,236	1,292	224	0	0
Ballentine Partners, LLC	0	0	0	10,304	10,590	11,143
Bâloise Asset Management	5,099	4,871	4,871	5,264	19,937	20,145
Balyasny Asset Management LP	0	0	0	0	0	0
Banca Credinvest SA	0	0	0	0	0	0
Banca Finnat Euramerica S p A	0	0	0	23,000	0	0
Banca Popolare di Sondrio (Suisse) S A	0	0	0	0	0	0
Banco Santander SA	0	17,206	1,167,245	1,171,990	1,172,253	1,171,197
Bank Julius Bär & Co AG	0	0	74,914	72,000	0	72,294
Bank of Montreal Europe PLC	0	0	0	0	0	0
Bank Vontobel AG (Private Banking)	0	0	17,338	0	0	0
Bankia Fondos, S G I I C , S A NLE	14,370	14,370	14,370	14,370	14,370	14,370
Bankinter Gestión de Activos, SGIC S A	0	0	0	0	0	0
Banque Cantonale Vaudoise	0	59,039	68,273	47,927	60,800	60,800
Banque de Luxembourg S A	0	0	0	0	0	0
Banque Degroof Petercam Luxembourg S A	0	0	0	0	0	0
Banque Degroof Petercam N V	0	0	0	0	0	0
Banque Pictet & Cie S A	617,800	722,020	715,500	733,500	715,500	715,500
Banque Vontobel SA	0	0	12,310	12,310	12,310	12,310
Bantleon Bank AG	0	0	0	2,364	6,092	2,127
Barclays Bank PLC	0	0	0	0	4,439	0
Barclays Capital	0	0	4,445	4,445	4,445	0
Barclays Capital Inc	0	0	0	0	0	0
Barclays Wealth	0	87,214	87,563	94,405	97,976	95,730
Barclays Wealth Managers España, S A , S G I I C	0	0	0	0	0	0
Barrow, Hanley, Mewhinney & Strauss, LLC	0	0	0	0	0	0
Baumann and Partners S A	37,500	37,500	37,500	20,000	20,000	20,000
Bayerische Vermögen AG	0	0	0	30,000	30,000	30,000
BayernInvest Kapitalanlagegesellschaft mbH	0	0	2,784	0	0	0
Bayesian Capital Management, LP	0	0	0	0	19,900	0
BBVA Asset Management, S A , S G I I C	75,919	53,781	53,778	53,778	55,076	54,978

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41.0%	51.7%	46.2%	46.6%	49.6%	45.8%	44.0%	50.7%	49.0%	43.4%	45.3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
BDO Wealth Advisors, LLC	0	0	750	750	750	0	0	0	0	0	0
Bellatrix Asset Management	55,000	55,000	55,000	55,000	55,000	55,000	125,000	125,000	125,000	125,000	0
Bellecapital International Ltd	0	0	0	0	0	78,547	86,054	82,649	42,037	14,369	75,694
Benjamin F. Edwards & Company, Inc	0	0	0	0	0	0	0	0	0	0	0
Berman Capital Advisors, LLC	0	0	0	0	0	0	0	0	99	1,038	1,062
Berner Kantonalbank AG	0	0	4,525	4,504	4,535	3,643	3,681	3,793	3,781	3,735	3,410
Bessemer Trust Company, N A (US)	222	0	172	149	149	0	0	0	206,622	206,622	206,622
BetaShares Capital Ltd	0	0	16,597	23,155	29,063	32,820	31,487	31,204	28,232	0	0
BFT Investment Managers	0	0	0	0	0	0	0	0	0	432,468	0
BG Fund Management Luxembourg S A	5,434	1,451	1,451	8,020	9,753	15,391	28,329	27,109	27,109	6,131	5,767
BI Asset Management Fondsmaglerselskab A/S	0	0	0	0	0	0	0	0	0	14,873	14,873
Bishop Street Capital Management Corp	0	0	0	0	0	0	0	152	85	85	0
BlackRock Advisors (UK) Limited	8,234,789	8,312,500	12,841,712	0	0	0	0	7,731,339	7,923,277	8,418,452	7,279,779
BlackRock Asset Management Canada Limited	53,015	58,546	105,478	118,443	142,928	171,893	183,333	183,333	195,391	195,391	238,104
BlackRock Asset Management Deutschland AG	26,823,266	19,947,485	32,102,376	35,462,825	34,478,961	34,655,102	32,563,270	26,043,900	26,387,145	22,891,691	22,531,415
BlackRock Asset Management Ireland Limited	10,272	10,272	10,272	10,272	0	0	0	0	0	0	0
BlackRock Asset Management North Asia Limited	12,004	8,723	16,918	16,519	16,519	7,586	7,861	5,259	4,950	13,702	14,941
BlackRock Financial Management, Inc	3,800	3,800	100	1,700	300	0	0	0	0	0	0
BlackRock Fund Advisors	0	0	0	0	491,219	478,414	478,414	478,414	452,705	592,085	592,085
BlackRock Institutional Trust Company, N A	0	71,301,616	93,742	78,531	0	11,728	0	109,243,409	109,596,495	108,037,982	107,190,810
BlackRock International Ltd	1,046,480	1,046,480	1,046,480	0	0	0	0	0	0	0	0
BlackRock Investment Management (Australia) Ltd	9,653	2,778	3,861	4,210	4,908	4,908	4,181	4,181	4,475	4,749	4,473
BlackRock Investment Management (UK) Ltd	1,800	1,800	0	0	5,493,438	5,394,849	4,829,238	4,663,918	5,998,330	6,247,550	6,421,224
BlackRock Investment Management, LLC	0	0	0	0	0	0	0	0	0	0	0
Bluefin Trading, LLC	175,280	0	98,576	126,050	31,900	84,681	0	85,442	48,439	0	39,771
Blueshift Asset Management, LLC	0	0	0	0	0	0	0	0	0	0	0
BMO Asset Management Inc	88,500	96,007	173,447	191,224	194,726	194,673	195,958	194,658	288,392	287,315	287,166
BMO Capital Markets (US)	2,800	0	7,400	4,000	1,609,099	1,221,932	0	0	0	501,800	6,850
BMO Family Office, LLC	66,102	66,102	104,685	66,712	63,975	71,292	72,674	40,808	97,085	127,195	109,066
BMO Global Asset Management	71,741	75,773	127,494	221,597	163,760	180,923	4,507	26,463	36,289	89,485	82,737
BMO Harris Bank N A	0	0	0	100	0	0	0	145	0	0	0
BMO Nesbitt Burns Inc	4,885	2,800	2,515	6,599	3,545	6,115	1,657	11,820	10,802	17,890	1,500
BN & Partners Deutschland AG	6,080	6,080	6,080	6,080	6,080	6,080	6,080	6,080	6,080	6,080	0
BNP Paribas Asset Management Belgium S A	48,461	48,461	48,461	48,461	48,461	48,461	48,461	48,461	0	0	0
BNP Paribas Asset Management Brasil Ltda	0	1,690,178	1,690,178	1,690,178	1,690,178	1,690,178	1,690,178	878,087	878,087	878,087	878,087
BNP Paribas Asset Management France SAS	10,811,900	10,964,211	4,730,581	8,650,118	11,217,873	12,202,083	14,283,040	8,772,032	3,830,591	7,907,970	2,188,720
BNP Paribas Asset Management Nederland N V	20,725	20,725	20,725	20,725	20,725	0	0	0	0	0	0
BNP Paribas Asset Management UK Limited	3,881	4,898	4,966	4,966	4,966	4,966	4,966	4,966	4,966	8,192	8,192
BNP Paribas Investment Partners SGR SpA	13,500	0	0	0	0	0	0	0	0	0	0
BNP Paribas Luxembourg	132,589	132,589	132,589	132,589	668,816	213,514	0	0	0	0	0
BNP Paribas Securities Corp North America	70,318	106,702	84,729	46,196	41,118	71,744	158,244	80,140	47,564	93,779	120,052
BNY Mellon Asset Management	1,422,660	1,450,138	2,184,083	2,222,726	2,284,174	2,208,135	2,099,586	1,994,419	1,974,748	1,873,885	1,864,208
BNY Mellon Wealth Management	197,848	430,740	483,181	242,069	264,948	38,467	30,548	30,467	15,067	25,283	20,391
BOCI-Prudential Asset Management Ltd	42,658	60,684	60,684	70,760	70,760	83,432	83,432	88,409	88,409	129,314	129,314
BofA Global Research (US)	38,105,297	6,618,557	4,613,492	12,627,343	11,265,846	16,793,600	20,373,987	31,658,694	28,770,204	14,230,619	22,486,260

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
BDO Wealth Advisors, LLC	0	0	0	0	0	0
Bellatrix Asset Management	0	0	0	0	0	0
Bellecapital International Ltd	10,469	13,431	0	0	0	0
Benjamin F Edwards & Company, Inc	300	300	300	300	300	300
Berman Capital Advisors, LLC	1,072	975	534	1,066	1,066	1,066
Berner Kantonalbank AG	4,727	4,920	5,073	4,830	0	0
Bessemer Trust Company, N A (US)	206,622	206,622	206,622	206,622	0	0
BetaShares Capital Ltd	13,904	10,702	10,152	18,776	21,733	21,559
BFT Investment Managers	0	0	0	0	0	0
BG Fund Management Luxembourg S A	17,529	0	20,828	0	0	17,221
BI Asset Management Fondsmaglerselskab A/S	37,269	37,269	37,269	37,269	37,269	37,269
Bishop Street Capital Management Corp	0	0	0	0	0	0
BlackRock Advisors (UK) Limited	7,754,541	8,662,495	9,356,965	8,431,465	8,653,192	9,164,437
BlackRock Asset Management Canada Limited	300,254	300,254	322,768	322,768	322,768	355,368
BlackRock Asset Management Deutschland AG	22,442,580	22,757,420	20,425,418	20,699,574	20,631,848	24,492,912
BlackRock Asset Management Ireland Limited	0	0	0	0	0	0
BlackRock Asset Management North Asia Limited	15,757	15,757	19,188	19,188	19,188	19,188
BlackRock Financial Management, Inc	0	31,989	90,203	24,444	28,120	59,103
BlackRock Fund Advisors	455,145	455,145	441,373	412,845	408,134	340,723
BlackRock Institutional Trust Company, N A	106,506,812	106,506,812	3,002	0	10,327	13,765
BlackRock International Ltd	0	0	0	0	0	0
BlackRock Investment Management (Australia) Ltd	4,749	5,024	6,164	9,231	9,021	10,113
BlackRock Investment Management (UK) Ltd	6,725,751	6,763,106	6,686,285	6,560,914	6,489,942	6,516,168
BlackRock Investment Management, LLC	0	0	0	0	129	457
Bluefin Trading, LLC	21,435	17,936	0	43,011	32,530	79,926
Blueshift Asset Management, LLC	0	18,951	11,601	0	0	11,890
BMO Asset Management Inc	288,166	349,445	350,397	421,963	421,963	429,921
BMO Capital Markets (US)	0	0	0	895,634	5,108,909	5,294,180
BMO Family Office, LLC	94,977	96,638	10,515	9,461	10,072	11,755
BMO Global Asset Management	92,313	49,978	68,105	116,918	41,760	41,862
BMO Harris Bank N A	0	0	0	0	0	0
BMO Nesbitt Burns Inc	600	30	630	630	1	36,351
BN & Partners Deutschland AG	0	0	15,000	0	0	0
BNP Paribas Asset Management Belgium S A	0	0	0	0	0	0
BNP Paribas Asset Management Brasil Ltda	878,087	878,087	878,087	878,087	0	0
BNP Paribas Asset Management France SAS	2,191,646	2,439,678	2,845,390	4,247,396	1,004,502	1,055,426
BNP Paribas Asset Management Nederland N V	0	0	0	0	0	0
BNP Paribas Asset Management UK Limited	6,213	5,624	0	6,106	6,106	0
BNP Paribas Investment Partners SGR SpA	0	0	0	0	0	0
BNP Paribas Luxembourg	0	0	0	0	0	0
BNP Paribas Securities Corp North America	101,462	75,394	53,648	63,471	48,681	48,681
BNY Mellon Asset Management	1,828,883	1,803,656	1,720,337	1,832,328	1,842,172	1,826,985
BNY Mellon Wealth Management	24,448	22,757	28,077	41,997	42,772	42,998
BOCI-Prudential Asset Management Ltd	164,357	164,357	162,580	162,580	167,417	167,417
BofA Global Research (US)	18,993,663	19,070,359	9,884,569	15,885,199	17,295,905	14,908,682

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Boost&Co SAS	27,925	27,925	27,925	27,925	0	0	0	0	0	0	0
Boothbay Fund Management, LLC	0	0	0	0	0	0	0	0	0	0	0
BOS Wealth Management Malaysia Berhad	2,630	1,315	1,315	1,315	0	0	0	0	0	0	0
Bovay & Partenaires SA	0	0	0	0	0	0	0	0	0	0	20,000
BPI Gestão de Activos - S G F I M , S A	22,938	45,645	30,800	30,800	32,171	32,171	26,859	17,733	16,788	9,973	1,437
Bradley, Foster & Sargent, Inc	0	0	13,500	14,000	14,000	31,000	10,000	10,250	0	0	0
Brand New Day Bank N V	700,000	342,772	255,514	0	300,000	230,569	0	0	0	0	0
Brave Asset Management, Inc	0	0	23,299	28,321	27,858	23,191	0	0	0	0	0
Brinker Capital Inc	0	0	0	45,979	0	0	0	0	0	0	0
Bristol Advisors, LLC	0	0	97,500	96,600	90,200	22,700	22,700	22,700	22,700	18,600	18,600
British Columbia Investment Management Corp	1,216,412	1,538,498	1,538,498	1,538,498	1,538,498	522,193	522,193	522,193	522,193	5,681,515	0
Bronson Point Management, LLC	0	650,000	0	0	0	0	0	0	0	0	0
Brueellian Wealth Management	0	0	0	0	35,000	35,000	0	0	0	0	0
Bruno Walter Finance SA	6,800	6,800	10,200	10,200	10,200	10,200	10,200	10,200	10,200	10,200	10,200
BV & P Vermögen AG	26,005	26,005	26,005	26,005	0	0	0	0	0	0	0
CA Indosuez (Switzerland) S A	15,600	24,300	31,550	34,750	26,750	31,850	33,600	1,500	4,090	18,350	20,110
CA Indosuez Wealth (Europe) S A	134,044	106,304	74,531	46,181	41,557	45,327	45,327	13,477	13,477	17,673	2,673
CACEIS Bank S A	0	0	0	0	0	0	0	0	0	0	0
Caisse de Depot et Placement du Quebec	896,740	855,175	0	88,556	13,120	41,892	176,217	139,351	226,920	67,612	595,297
Caixabank Asset Management SGIC, S A U	301,105	288,978	407,797	384,655	374,702	338,014	334,287	107,068	361,065	14,370	14,370
Caja España Fondos, S A , S G I I C	3,000	3,000	27,000	35,500	35,500	35,500	35,500	0	0	0	0
Caja Laboral Gestión S G I I C , S A	2,236	2,236	2,236	2,236	2,236	2,236	0	0	0	0	0
Caldwell Investment Management Ltd	400,710	400,710	600,710	600,710	600,710	600,710	300,710	300,710	300,710	0	0
California Public Employees' Retirement System	5,438,065	5,438,065	6,137,986	6,137,986	6,137,986	6,137,986	3,665,496	3,665,496	3,665,496	3,665,496	2,982,282
California State Teachers Retirement System	0	0	0	0	0	0	0	0	0	0	0
Callan LLC	41,185	26,743	40,777	34,856	35,491	39,104	36,579	41,569	45,410	45,023	46,499
Calton & Associates, Inc	0	0	0	0	2,704	0	0	0	0	0	0
Calvert Research and Management	13,961	13,961	21,138	18,506	18,506	17,350	11,647	17,320	16,668	16,668	16,668
Cambiar Investors LLC	11,705	11,705	0	0	0	0	0	0	0	0	0
Cambridge Investment Research Advisors, Inc	0	0	0	0	0	0	0	0	0	34,396	34,988
CamGestion NLE	290,969	290,969	290,969	290,969	0	0	0	0	0	0	0
Campbell & Company, Inc	0	0	0	0	0	0	0	0	0	0	0
Candriam Belgium S A	327,669	304,802	412,415	400,099	400,013	391,345	384,412	401,202	438,706	465,235	418,928
Candriam Luxembourg S A	0	0	0	0	0	0	50,085	51,010	49,959	49,959	13,111
Candriam S A (France)	169,555	283,255	422,439	518,576	498,556	516,985	408,462	464,367	477,666	489,993	343,561
Capital Fund Management S A	0	0	0	0	0	0	0	0	0	0	0
Capital Guardian Trust Company	0	0	0	0	0	246,680	241,297	231,597	222,497	222,497	0
Capital Insight Partners, LLC	64,380	64,380	0	0	0	0	0	0	0	0	0
Capital International Investors	0	0	0	0	0	4,183,635	4,183,635	4,316,708	4,315,130	4,353,684	3,097,408
Capital International Ltd	0	0	0	0	0	113,910	129,237	0	0	5,297	15,004
Capital International Sarl	0	0	0	0	0	280,754	332,678	406,829	406,829	340,222	0
Capital International, Inc	0	0	0	0	0	139,707	162,357	162,357	162,357	167,183	88,522
Capital One Asset Management, LLC	0	13,351	18,508	19,602	0	0	0	0	0	0	0
Capital Research Global Investors	0	6,550,000	1,260,000	1,260,000	0	0	0	0	0	0	0
Capital World Investors	15,301,581	6,550,000	23,884,260	23,884,285	23,884,285	0	0	0	4,358,231	4,331,562	2,899,744

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Boost&Co SAS	0	0	0	0	0	0
Boothbay Fund Management, LLC	0	0	0	20,000	0	0
BOS Wealth Management Malaysia Berhad	0	0	0	0	0	0
Bovay & Partenaires SA	20,000	20,000	20,000	20,000	20,000	0
BPI Gest�o de Activos - S G F I M , S A	1,359	1,359	1,359	0	0	0
Bradley, Foster & Sargent, Inc	0	0	0	0	0	0
Brand New Day Bank N V	0	0	0	0	0	0
Brave Asset Management, Inc	0	0	0	0	0	0
Brinker Capital Inc	0	0	0	0	0	0
Bristol Advisors, LLC	18,600	18,600	18,600	18,600	18,600	18,600
British Columbia Investment Management Corp	0	216,757	118,200	79,239	68,502	54,470
Bronson Point Management, LLC	0	0	0	0	0	0
Bruellan Wealth Management	0	0	0	0	0	0
Bruno Walter Finance SA	10,200	10,200	10,200	10,200	10,200	0
BV & P Verm�gen AG	0	0	0	0	0	0
CA Indosuez (Switzerland) S A	20,110	20,110	20,110	11,420	9,145	13,145
CA Indosuez Wealth (Europe) S A	2,848	2,673	2,195	0	2,195	0
CACEIS Bank S A	0	0	0	0	130,403	130,403
Caisse de Depot et Placement du Quebec	370,314	1,709,214	514,939	1,348,913	0	0
Caixabank Asset Management SGIIC, S A U	14,370	14,370	14,370	14,370	14,370	14,370
Caja Espa�a Fondos, S A , S G I I C	0	0	0	0	0	0
Caja Laboral Gest�n S G I I C , S A	0	0	0	0	0	0
Caldwell Investment Management Ltd	0	0	0	0	0	0
California Public Employees' Retirement System	2,982,282	2,982,282	2,982,282	4,765,874	4,765,874	4,765,874
California State Teachers Retirement System	0	0	0	2,251,582	2,251,582	2,251,582
Callan LLC	50,504	48,637	54,470	58,051	59,809	59,809
Calton & Associates, Inc	0	0	0	0	0	0
Calvert Research and Management	16,668	13,741	15,978	15,919	15,919	15,086
Cambiar Investors LLC	0	0	0	0	0	0
Cambridge Investment Research Advisors, Inc	39,281	46,071	98,147	96,653	100,205	103,972
CamGestion NLE	0	0	0	0	0	0
Campbell & Company, Inc	0	0	0	36,500	31,100	82,985
Candriam Belgium S A	309,985	294,298	305,729	220,303	233,959	224,873
Candriam Luxembourg S A	0	0	0	0	0	0
Candriam S A (France)	366,238	134,732	117,436	110,211	110,211	110,211
Capital Fund Management S A	0	0	0	178,134	588,328	72,381
Capital Guardian Trust Company	0	0	0	0	0	0
Capital Insight Partners, LLC	0	0	0	0	0	0
Capital International Investors	0	0	0	0	0	0
Capital International Ltd	0	0	0	0	0	0
Capital International Sarl	0	0	0	0	0	0
Capital International, Inc	0	0	0	0	0	16,370
Capital One Asset Management, LLC	0	0	0	0	0	0
Capital Research Global Investors	0	0	77,277,774	77,326,742	77,323,307	98,823,423
Capital World Investors	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41.0%	51.7%	46.2%	46.6%	49.6%	45.8%	44.0%	50.7%	49.0%	43.4%	45.3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Capstone Investment Advisors, LLC	0	0	0	0	0	0	0	0	0	4,658	2,488
Caption Management, LLC	0	0	0	0	0	0	0	0	0	0	22,500
CAPTRUST Financial Advisors	0	0	0	0	0	0	0	0	0	0	0
Carmichael Hill & Associates Inc	0	0	0	0	0	0	0	0	0	0	0
Carmignac Gestion	0	0	263,859	263,859	263,859	263,859	263,859	177,158	177,158	177,158	177,158
Cassa4Funds Luxembourg European Asset Management S A	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	2,916	0
Castle Hook Partners LP	0	0	0	0	2,236,992	0	0	0	0	0	0
CATAM Asset Management AG	0	0	20,000	0	0	0	0	0	0	0	0
Catamount Wealth Management NLE	20,000	20,000	19,912	1,412	412	412	0	0	0	0	0
Catana Capital GmbH	0	0	0	0	0	0	0	0	0	12,421	12,421
Cathay Securities Investment Trust Co., Ltd	43,287	43,287	43,287	43,287	43,287	43,287	43,287	43,287	0	0	0
Causeway Capital Management LLC	0	0	0	0	0	0	0	0	0	0	0
CBR Investment AG NLE	4,000	4,000	4,000	4,000	6,200	6,200	6,200	6,200	6,200	6,200	6,200
CD Capital GmbH	0	0	0	0	9,400	9,400	9,400	9,400	9,400	9,400	9,400
Centaurus Financial, Inc	0	0	0	0	0	0	1,775	0	0	0	0
CenterStar Asset Management, LLC	0	0	0	0	0	10,831	0	0	0	0	0
Cerberus Capital Management, L P	0	0	0	0	62,035,000	62,035,000	62,035,000	62,035,000	62,035,000	62,035,000	62,035,000
Cerebellum Capital, LLC	0	0	0	0	0	11,865	11,397	0	0	0	0
Ceresio Investors	0	0	0	0	0	0	0	0	0	0	0
Cerity Partners LLC	0	0	0	0	0	0	0	10,152	11,513	16,505	13,500
Charles Schwab Investment Management, Inc	1,450,347	2,018,412	2,524,662	2,714,144	2,716,717	2,986,018	3,113,323	3,308,038	3,712,808	3,829,897	4,117,840
Chescapmanager, L L C	0	10,000	45,000	45,000	45,000	45,000	0	0	0	0	0
Chicago Partners Wealth Advisors	0	0	0	431	0	0	0	0	0	0	0
Childress Capital Advisors, LLC	0	0	0	0	0	0	0	0	0	0	0
China Post & Capital Global Asset Management Limited	0	0	0	0	0	0	0	0	0	0	0
CIBC Asset Management Inc	89,069	100,400	124,187	125,707	128,170	129,227	125,801	125,801	132,727	51,964	54,444
CIBC World Markets Inc	15,170	0	29,304	0	13,835	39,424	36,304	36,104	34,304	47,404	46,804
CIGNA Investments, Inc	0	0	0	0	0	27,666	0	0	0	0	0
Citadel Advisors LLC	14,579	326,621	527,814	535,070	682,132	768,282	448,210	741,676	224,524	0	64,083
Citi Investment Research (US)	7,359,096	5,036,961	7,419,380	6,281,348	9,110,056	6,574,665	14,267,101	14,659,907	7,201,566	4,713,903	6,061,057
Citizens Financial Group, Inc	0	0	0	0	0	0	0	0	0	0	900
City National Rochdale, LLC	0	53	0	3,750	2,250	2,250	0	1,929	0	0	0
Claresco Finance S A	0	0	0	0	0	0	0	0	0	220	0
Clear Harbor Asset Management, LLC	0	0	0	0	0	0	0	0	0	0	0
Clear Street Markets LLC	0	0	89,100	45,200	27,400	0	0	0	0	0	0
ClearArc Capital, Inc. NLE	300	300	300	300	0	0	0	0	2,500	0	0
CMT Asset Management Limited	172,345	0	0	0	0	0	0	0	0	0	0
CMT Capital Markets Trading GmbH	93,762	0	0	0	0	0	0	0	0	0	0
Cognios Capital	1,399	0	0	0	0	0	0	0	0	0	0
Cohen & Steers Capital Management, Inc	0	123,608	185,412	174,100	174,100	174,100	0	0	0	0	0
COLLEGIUM Vermoogensverwaltungs AG	18,200	18,200	18,200	8,200	8,200	8,200	8,200	8,200	8,200	8,200	0
Columbia Threadneedle Investments (UK)	209,603	209,603	209,603	0	0	0	0	0	0	0	0
Columbia Threadneedle Investments (US)	94,593	102,535	137,304	130,114	138,230	125,054	172,616	204,860	171,640	228,871	258,064
Columbus Hill Capital Management, L P	550,000	0	0	0	0	0	0	0	0	0	0
Column Capital Advisors, LLC	0	0	0	0	0	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44.6%	45.0%	43.2%	39.4%	38.7%	39.4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Capstone Investment Advisors, LLC	0	0	0	0	0	0
Caption Management, LLC	100,000	85,000	196,600	431,493	310,100	584,000
CAPTRUST Financial Advisors	0	0	0	0	0	300
Carmichael Hill & Associates Inc	0	0	0	200	300	0
Carmignac Gestion	177,158	177,158	177,158	177,158	0	0
Casa4Funds Luxembourg European Asset Management S A	0	0	0	0	0	0
Castle Hook Partners LP	0	0	0	0	0	0
CATAM Asset Management AG	0	0	0	0	0	0
Catamount Wealth Management NLE	0	0	0	0	0	0
Catana Capital GmbH	12,421	12,421	12,421	12,421	29,166	12,421
Cathay Securities Investment Trust Co., Ltd	0	0	0	0	0	0
Causeway Capital Management LLC	0	0	0	0	0	6,464
CBR Investment AG NLE	6,200	0	0	0	0	0
CD Capital GmbH	0	0	0	0	0	0
Centaurus Financial, Inc	0	0	0	0	0	0
CenterStar Asset Management, LLC	0	0	0	0	0	0
Cerberus Capital Management, L P	62,035,000	62,035,000	62,035,000	62,035,000	62,035,000	62,035,000
Cerebellum Capital, LLC	0	0	0	0	7,681	7,681
Ceresio Investors	0	0	0	93,942	93,942	98,502
Cerity Partners LLC	19,920	17,911	17,911	17,800	18,800	12,800
Charles Schwab Investment Management, Inc	4,354,041	4,480,720	4,817,732	4,414,836	4,329,752	4,367,968
Chescapmanager, L L C	0	0	0	0	0	0
Chicago Partners Wealth Advisors	0	0	0	0	0	0
Childress Capital Advisors, LLC	0	0	0	0	0	159
China Post & Capital Global Asset Management Limited	0	0	0	0	241,991	241,991
CIBC Asset Management Inc	57,190	63,274	66,559	75,224	84,780	84,780
CIBC World Markets Inc	46,204	44,904	58,806	93,301	30,410	44,777
CIGNA Investments, Inc	0	0	0	0	0	0
Citadel Advisors LLC	0	90,387	0	0	461,607	120,813
Citi Investment Research (US)	12,671,321	14,121,066	11,490,069	11,498,710	15,697,410	13,453,998
Citizens Financial Group, Inc	0	0	1,120	1,156	0	0
City National Rochdale, LLC	2	216	1,241	0	279	845
Claresco Finance S A	8,286	31,668	0	0	0	0
Clear Harbor Asset Management, LLC	33,225	10,525	0	0	0	0
Clear Street Markets LLC	0	0	0	0	0	0
ClearArc Capital, Inc. NLE	0	0	0	0	0	0
CMT Asset Management Limited	0	0	0	0	0	0
CMT Capital Markets Trading GmbH	0	0	0	0	0	0
Cognios Capital	0	0	0	0	0	0
Cohen & Steers Capital Management, Inc	0	0	0	0	0	0
COLLEGIUM Vermoogensverwaltungs AG	0	0	0	0	0	0
Columbia Threadneedle Investments (UK)	0	0	0	0	0	0
Columbia Threadneedle Investments (US)	262,000	254,221	329,068	188,827	107,847	82,495
Columbus Hill Capital Management, L P	0	0	0	0	0	0
Column Capital Advisors, LLC	0	626	626	142	142	124

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Comerica, Inc	0	0	0	3,941	2,753	2,768	2,705	2,705	1,500	0	1,500
Commerzbank AG	13,639,279	9,179,366	14,300,182	19,056,479	16,515,331	14,169,862	15,811,812	14,892,249	15,543,616	0	16,480,174
Commonwealth Bank of Australia	897,985	882,531	749,482	721,779	791,710	678,087	400,051	290,084	7,248	6,299	5,713
Commonwealth Financial Network	0	0	0	0	0	0	13,253	14,103	14,403	13,000	15,222
Compagnie Lombard Odier SCA	24,905	5,339	6,339	4,607	1,500	1,500	1,500	21,500	21,500	41,500	1,500
Concourse Capital Management, LLC	0	143,790	326,615	138,705	191,913	0	0	0	0	0	0
Conning, Inc	0	0	0	0	0	0	57,900	0	0	0	0
CONQUEST Investment Advisory AG	0	0	0	0	0	0	0	100	100	100	100
Consortia Vermögensverwaltung AG	33,333	33,333	0	0	0	0	0	0	0	0	0
Consulinvest Asset Management SGR S p A	102,462	102,462	102,462	221,466	246,466	246,466	246,466	146,466	146,466	146,466	246,466
Continental Advisors LLC	61,000	116,000	174,000	174,000	174,000	231,300	298,800	266,300	0	0	0
Convergence Investment Partners, LLC	0	0	0	0	0	516	0	0	0	0	0
Convergent Wealth Advisors NLE	735	735	735	735	735	735	735	0	0	0	0
Corient Capital Partners, LLC	0	0	0	0	0	0	0	0	0	0	19,329
Cornèr Banca SA	15,000	10,000	30,000	20,000	39,000	99,000	185,000	181,000	120,000	120,000	120,000
Cornerstone Advisors, Inc (WA)	140	140	217	360	360	472	194	873	914	2,762	359
Counsel Portfolio Services, Inc	0	0	0	0	0	0	0	0	0	0	0
Courier Capital, LLC	0	0	0	0	31,170	29,985	28,485	25,985	0	0	0
Cowen & Co., LLC	0	0	0	0	0	0	0	0	0	0	160,000
Cowen Investment Management LLC	0	50,000	0	0	0	0	0	0	0	0	0
Coyle Financial Counsel LLC	0	0	0	0	0	0	0	0	0	0	0
CPP Investment Board	241,288	459,888	1,103,444	483,084	3,345,184	3,345,184	740,766	821,720	47,431	81,625	419
CPR Asset Management	644,583	644,583	644,583	644,583	184,516	221,317	256,467	1,061,132	732,683	177,645	1,042,729
Creand Wealth Management	0	0	0	0	0	0	0	0	0	0	0
Creative Financial Designs, Inc	35	35	35	35	35	35	35	35	0	0	0
Creative Planning, Inc	18,605	9,145	11,439	11,198	11,120	13,536	20,723	23,374	16,527	17,964	21,849
Crédit Agricole Corporate and Investment Bank	1,600,000	1,526,718	766,658	555,594	759,171	496,111	394,431	878,300	878,300	878,300	10,856
Credit Mutuel Asset Management	32,182	20,763	30,854	30,854	0	0	0	0	0	0	0
Credit Suisse (Brasil) DTVM S A	0	0	0	0	0	5,252	5,543	8,358	9,004	9,657	11,936
Credit Suisse (France)	990	990	990	0	0	0	0	0	0	0	0
Credit Suisse (Luxembourg) S A	18,518	18,518	18,518	18,518	18,518	0	0	0	0	0	0
Credit Suisse Asset Management	3,752,747	3,585,190	5,326,656	5,944,347	6,119,799	7,944,893	8,221,048	7,543,223	5,295,783	7,172,162	8,316,033
Credit Suisse Asset Management, LLC (US)	0	0	827	0	0	0	0	0	0	0	0
Crédit Suisse Gestion S G I I C, S A	12,555	12,555	15,270	15,270	15,270	8,145	8,145	8,145	8,145	8,145	8,145
Credit Suisse International	2,999,852	233,770	1,064,747	868,208	1,272,173	1,201,675	2,237,800	2,681,906	2,650,895	3,085,424	6,530,674
Credit Suisse Securities (Europe) Limited	2,103,207	3,017,029	3,017,029	3,242,044	4,473,302	1,372,680	2,018,220	3,390,559	1,535,038	514,457	2,723,001
Credit Suisse Securities (USA) LLC	8,856	23,509	48,050	18,827	116,850	18,290	3,427	3,100	0	0	0
Crédito Agrícola Gest-Sociedade Gest de Fundos de Invest Mobiliário	0	0	0	0	0	2,600	2,600	2,600	2,600	2,600	2,600
Cresset Asset Management, LLC	0	0	0	0	0	0	0	0	69	69	0
Creutz & Partners, Global Asset Management S A	0	0	0	0	0	0	0	100,000	150,000	150,000	150,000
Crewe Advisors LLC	0	0	0	0	0	0	0	0	0	0	0
Cribstone Capital Management, LLC	400	200	0	0	0	0	500	500	500	500	0
Crossmark Global Investments, Inc	122,565	128,085	175,955	207,158	209,960	189,958	144,270	163,697	160,047	157,324	153,047
CSR Beratungsgesellschaft mbH	0	0	0	0	0	0	0	0	58,041	58,041	68,024
CSS, LLC	134,580	380,966	34,900	24,900	12,900	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44.6%	45.0%	43.2%	39.4%	38.7%	39.4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Comerica, Inc	3,675	3,675	3,675	3,675	3,675	4,964
Commerzbank AG	16,156,222	13,053,434	4,846,827	764,555	221,474	765,782
Commonwealth Bank of Australia	5,713	0	0	0	0	0
Commonwealth Financial Network	11,962	10,022	10,431	0	0	0
Compagnie Lombard Odier SCA	1,500	1,500	1,500	4,500	10,000	10,000
Concourse Capital Management, LLC	0	0	0	0	0	0
Conning, Inc	0	0	0	0	0	0
CONQUEST Investment Advisory AG	100	100	100	100	0	0
Consortia Vermögensverwaltung AG	0	0	0	0	0	0
Consulinvest Asset Management SGR S.p.A.	246,466	355,000	460,000	260,000	260,000	260,000
Continental Advisors LLC	0	0	0	0	0	0
Convergence Investment Partners, LLC	0	0	0	0	0	0
Convergent Wealth Advisors, NLE	0	0	0	0	0	0
Corient Capital Partners, LLC	17,731	19,201	14,625	13,224	12,644	0
Cornèr Banca S.A.	120,000	120,000	120,000	120,000	120,000	0
Cornerstone Advisors, Inc. (WA)	0	0	0	0	0	0
Counsel Portfolio Services, Inc	0	0	0	20,900	20,900	20,830
Courier Capital, LLC	0	0	0	0	0	0
Cowen & Co., LLC	160,000	0	0	0	0	0
Cowen Investment Management LLC	0	0	0	0	0	0
Coyle Financial Counsel LLC	0	20,000	0	0	0	0
CPPI Investment Board	31	577,674	544,369	1,036,679	2,246,926	2,246,926
CPR Asset Management	474,862	211,679	606,260	824,861	991,123	593,472
Creand Wealth Management	0	0	0	9,535	0	0
Creative Financial Designs, Inc	0	0	0	35	35	35
Creative Planning, Inc	36,729	0	21,603	19,400	22,027	19,197
Crédit Agricole Corporate and Investment Bank	3,820	1,700	0	0	0	1,551,000
Credit Mutuel Asset Management	0	0	0	0	380,032	26,882
Credit Suisse (Brasil) DTVM S.A.	14,550	15,988	0	0	0	0
Credit Suisse (France)	0	0	0	0	0	0
Credit Suisse (Luxembourg) S.A.	0	0	0	0	0	0
Credit Suisse Asset Management	8,899,614	6,610,880	11,496,977	9,337,559	7,089,065	4,863,866
Credit Suisse Asset Management, LLC (US)	0	0	0	0	0	0
Crédit Suisse Gestion S.G.I.C., S.A.	8,145	8,145	8,145	8,145	8,145	8,145
Credit Suisse International	2,676,798	8,508,303	5,333,065	3,725,918	3,943,320	4,595,162
Credit Suisse Securities (Europe) Limited	3,970,147	1,157,801	616,523	2,053,956	6,342,751	1,359,830
Credit Suisse Securities (USA) LLC	0	0	7,819	0	0	0
Crédito Agrícola Gest-Sociedade Gest de Fundos de Invest. Mobiliário	2,600	2,600	0	0	0	0
Cresset Asset Management, LLC	12,793	12,652	18,214	0	0	0
Creutz & Partners, Global Asset Management S.A.	0	0	0	0	0	0
Crewe Advisors LLC	0	0	0	0	600	600
Cribstone Capital Management, LLC	0	0	0	0	0	0
Crossmark Global Investments, Inc	125,279	126,279	132,048	143,511	139,160	147,493
CSR Beratungsgesellschaft mbH	127,066	138,910	162,828	116,921	114,549	104,217
CSS, LLC	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Cubist Systematic Strategies, LLC	0	20,511	19,526	55,750	17,868	62,635	0	0	113,256	58,677	10,908
Cumerius Management GmbH	6,000	0	0	0	0	0	0	0	0	0	0
Cutler Group, LP	2,100	37,539	7,527	14,932	2,559	6,300	0	0	17,900	24,100	10,500
D E Shaw & Co , L P	0	0	0	0	0	0	39,139	194,581	116,681	117,700	45,513
D A Davidson & Co	6,526	20,712	26,530	25,382	0	0	0	0	0	0	0
Daiwa Asset Management (Singapore) Ltd	1,483	1,483	1,483	19,586	32,782	32,782	32,782	33,020	37,396	37,396	37,396
Daiwa Asset Management Co , Ltd	32,150	32,150	49,785	51,388	51,419	51,419	51,696	50,650	53,150	53,150	80,487
Danske Bank	13,480	13,480	13,480	13,480	0	0	0	0	0	0	0
Danske Bank Asset Management	59,720	121,414	150,278	175,794	293,356	366,503	811,826	637,940	634,868	747,695	636,628
Danske Invest Management Company S A	0	0	0	0	0	0	0	0	0	0	0
DB Platinum Advisors	84,357	122,859	118,917	123,686	123,686	123,686	123,686	123,686	123,686	123,686	0
DBX Advisors LLC	15,096	15,211	25,697	22,484	18,614	1,254,702	1,168,963	1,079,203	1,048,373	0	927,071
DBX Strategic Advisors LLC	11,637	11,637	11,637	0	0	0	0	0	0	0	0
Degroof Petercam Asset Management	413,006	413,006	654,250	695,527	785,327	754,301	753,001	462,101	431,101	377,601	370,601
Degroof Petercam Asset Services SA	44,145	44,145	66,217	66,217	66,217	66,217	66,217	66,217	65,617	64,617	64,617
Degussa Bank AG	518,145	418,145	418,145	418,145	418,145	468,145	468,145	468,145	468,145	509,895	468,145
Deka Investment GmbH	20,951,310	20,415,131	27,168,090	22,878,018	22,878,018	20,630,640	18,135,649	18,457,232	15,843,054	15,843,054	16,044,242
Deka Vermögensmanagement GmbH	28,269	30,419	200,498	355,500	355,500	466,500	4,200	4,200	4,200	4,200	4,200
Delpha Capital Management, L L C NLE	0	0	0	0	192	0	0	0	0	0	0
Delta Lloyd Asset Management N V NLE	105,145	105,145	182,603	222,085	233,534	0	0	0	0	0	0
Deltac Asset Management, LLC	139,000	108,000	371,500	87,500	22,000	22,000	0	0	0	0	0
Desjardins Global Asset Management	3,170	0	0	0	0	0	0	0	0	0	0
Deutsche Apotheker- und Ärzte Bank eG	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	0	0	0
Deutsche Asset Management Americas	19,537,837	30,378,493	34,053,143	27,164,074	31,647,326	21,301,727	18,112,290	8,374,255	5,220,157	80,076	6,096,297
Deutsche Bank (Suisse) SA	6,210	6,210	6,210	6,210	48,223	11,835	4,410	4,410	4,410	0	4,410
Deutsche Bank AG (Germany)	35,986	43,632	30,780	46,319	67,925	72,581	72,581	72,581	72,581	72,581	72,581
Deutsche Bank S p A	0	0	0	0	0	0	0	0	0	0	0
Deutsche Bank Securities Inc	23,705	23,705	23,705	23,705	23,705	23,705	23,705	23,705	23,705	23,705	23,705
Deutsche Oppenheim Family Office AG	0	0	0	0	0	0	0	0	0	0	5,655
Deutsche Wealth Management, S G I I C , S A	46,085	46,085	46,085	46,085	46,085	46,085	46,085	0	0	0	0
Didner & Gerge Fonder AB	0	0	1,000,000	2,800,000	4,800,000	6,100,000	6,100,000	6,100,000	0	0	0
Die Sparkasse Bremen AG	108,000	108,000	162,000	162,000	0	0	0	0	0	0	0
Diem Client Partner AG	12,000	12,000	44	44	20,000	20,000	20,000	20,000	20,000	20,000	65,000
Diligent Investors, LLC	0	0	0	0	0	0	10,500	10,500	10,500	10,500	10,500
Dimensional Fund Advisors, L P	3,022,667	3,464,100	5,405,319	5,395,996	5,354,088	5,553,116	5,649,527	5,653,158	5,979,508	6,021,895	5,878,041
Dimensional Fund Advisors, Ltd	65,630	48,074	85,074	79,690	81,640	118,304	123,416	148,395	190,597	184,733	485,007
DINAMIK S A	0	0	16,500	19,500	4,500	0	0	0	0	0	0
DIVAS Asset Management AG	0	0	0	0	0	0	0	0	0	0	187,207
DJD Partners Trust reg	0	0	0	30,000	0	0	0	0	0	0	0
DJE Kapital AG	151,000	148,000	157,000	117,000	262,201	137,583	137,583	0	0	0	0
DNB Asset Management AB	8,548	8,548	12,822	17,124	17,124	17,124	17,124	17,124	17,124	17,124	17,124
DNB Asset Management AS	62,455	85,107	121,431	117,312	117,312	284,840	310,344	192,091	172,121	161,930	162,054
Dominic et Co Asset Management	0	0	0	0	0	0	0	0	0	0	0
DONNER & REUSCHEL Aktiengesellschaft	3,397	3,397	3,397	3,397	3,397	3,397	3,397	3,397	0	0	0
DONNER & REUSCHEL Luxembourg S A	0	0	0	0	0	0	0	15,000	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44.6%	45.0%	43.2%	39.4%	38.7%	39.4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Cubist Systematic Strategies, LLC	99,953	355,120	44,818	465,537	362,667	360,881
Cumerius Management GmbH	0	0	0	0	0	0
Cutler Group, LP	18,000	55,000	63,000	61,716	46,529	59,900
D E Shaw & Co., L.P.	0	0	32,813	32,813	91,978	50,013
D A Davidson & Co	0	0	0	0	0	0
Daiwa Asset Management (Singapore) Ltd	37,813	40,474	40,474	40,474	40,696	44,378
Daiwa Asset Management Co., Ltd	87,104	89,906	89,906	100,927	101,149	100,067
Danske Bank	0	0	0	0	0	0
Danske Bank Asset Management	626,060	639,835	566,364	532,050	552,329	466,403
Danske Invest Management Company S A	16,653	31,933	36,093	36,093	40,638	40,638
DB Platinum Advisors	0	0	0	0	0	0
DBX Advisors LLC	914,813	923,042	790,732	699,119	627,695	573,498
DBX Strategic Advisors LLC	0	0	0	0	0	0
Degroof Petercam Asset Management	323,701	297,719	254,478	227,337	221,337	212,443
Degroof Petercam Asset Services SA	64,617	64,617	64,617	60,000	60,000	60,000
Degussa Bank AG	594,895	594,895	543,145	594,895	594,895	594,895
Deka Investment GmbH	16,133,608	13,060,871	11,459,325	12,252,081	12,307,176	12,740,573
Deka Vermögensmanagement GmbH	4,200	0	0	0	747,600	695,000
Delpha Capital Management, L.L.C. NLE	0	0	0	0	0	0
Delta Lloyd Asset Management N.V. NLE	0	0	0	0	0	0
Deltac Asset Management, LLC	10,000	12,500	0	0	0	0
Desjardins Global Asset Management	0	0	0	1,785	1,545	1,545
Deutsche Apotheker- und Ärzte Bank eG	0	0	0	0	0	0
Deutsche Asset Management Americas	2,651,820	482,441	761,966	10,116,029	1,959,115	1,737,457
Deutsche Bank (Suisse) SA	3,500	3,500	3,500	3,500	3,500	3,500
Deutsche Bank AG (Germany)	72,581	72,581	0	0	0	0
Deutsche Bank S.p.A.	0	0	0	0	0	6,000
Deutsche Bank Securities Inc	23,705	23,705	23,700	0	0	837
Deutsche Oppenheim Family Office AG	5,655	5,655	330	330	330	330
Deutsche Wealth Management, S.G.I.C., S.A.	0	0	0	0	0	0
Didner & Gerge Fonder AB	0	0	0	0	0	0
Die Sparkasse Bremen AG	0	0	0	0	0	0
Diem Client Partner AG	65,000	65,000	65,000	32,500	32,500	32,500
Diligent Investors, LLC	10,500	10,500	10,500	10,500	10,500	10,500
Dimensional Fund Advisors, L.P.	6,272,419	6,299,939	6,271,999	6,201,907	5,791,052	5,802,613
Dimensional Fund Advisors, Ltd	472,776	498,252	475,924	482,456	427,577	419,894
DINAMIK S.A.	0	0	0	0	0	0
DIVAS Asset Management AG	321,560	363,124	313,506	0	0	0
DJD Partners Trust reg	0	0	0	0	0	0
DJE Kapital AG	0	0	0	0	0	0
DNB Asset Management AB	23,475	23,475	29,710	13,120	18,817	18,817
DNB Asset Management AS	163,267	164,972	124,877	130,519	139,299	167,706
Dominicé et Co. Asset Management	0	0	0	0	0	8,694
DONNER & REUSCHEL Aktiengesellschaft	0	10,000	37,000	0	0	0
DONNER & REUSCHEL Luxembourg S.A.	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
D'Orazio & Associates, Inc	0	0	0	0	0	0	0	0	0	0	0
Dorval Asset Management	0	0	0	0	88,648	122,038	234,044	234,044	51,309	51,309	51,309
Dr. Bauer & Co. Vermögensmanagement GmbH	54,500	54,500	54,500	54,500	54,500	54,500	54,500	54,500	54,500	54,500	54,500
Dr. Kohlhasse Vermögensverwaltungsgesellschaft mbH	6,290	6,290	6,290	6,290	6,290	6,290	11,290	6,290	6,290	6,290	6,290
Dreman Value Management, L.L.C. NLE	325	0	487	487	487	487	487	487	487	487	487
DRW Securities, LLC	0	0	0	0	0	0	0	0	0	0	0
Dueemme International Luxembourg S.A. NLE	20,868	12,752	19,128	19,128	19,128	19,128	19,128	19,128	19,128	19,128	0
DUX Inversores, SGIC, S.A.	30,910	30,910	113,410	59,210	59,210	59,210	59,210	59,210	59,210	44,655	44,655
DVAM Vermögensverwaltung GmbH	0	0	0	7,000	0	0	9,000	0	2,500	0	0
DWS International GmbH	2,335,498	3,298,178	3,377,752	5,493,504	5,670,391	1,568,174	2,005,309	1,712,761	1,787,595	0	1,888,024
DWS Investment GmbH	20,631,979	19,939,797	30,429,687	30,143,126	22,654,151	16,351,513	16,471,395	15,463,756	12,059,138	0	2,147,014
DWS Investment Management Americas, Inc	6,754	6,057	9,085	8,273	0	0	0	0	0	0	0
DWS Investments UK Limited	21,637	45,276	39,815	39,815	15,212,522	16,575,210	15,420,433	11,736,784	11,716,812	0	11,856,717
Dynamic Technology Lab Pte Ltd	0	11,500	0	35,787	0	0	0	0	0	0	0
DZ Bank AG Deutsche Zentral-Genossenschaftsbank	2,782,907	2,523,150	3,698,995	4,053,967	4,217,527	4,758,927	4,966,357	4,391,765	5,081,833	4,406,698	4,279,172
DZ PRIVATBANK S.A.	20,500	0	0	0	0	0	0	0	0	0	0
E Öhman J or Fonder AB	35,208	35,208	63,853	63,853	59,368	53,368	0	0	0	0	0
Eagle West Group	0	0	0	0	0	0	0	0	0	0	0
EARNEST Partners, LLC	0	0	0	0	304	304	304	304	304	304	304
Eastspring Investments (Singapore) Limited	38,144	22,304	21,091	21,091	19,783	12,636	11,981	11,981	11,981	0	0
Eaatspring Securities Investment Trust Co. Ltd	28,311	28,311	24,825	24,825	31,335	31,335	31,335	31,335	31,335	31,335	31,335
Eaton Vance Management	0	0	0	0	0	0	0	0	0	0	0
EB Portfoliomanagement GmbH	0	0	2,376	2,376	2,376	4,707	4,707	7,398	5,461	5,461	5,461
Ecofi Investissements S.A.	11,840	11,840	10,724	8,194	13,254	13,254	13,254	13,254	0	0	0
EdenTree Investment Management Limited	60,000	30,000	45,000	45,000	45,000	45,000	0	0	0	0	0
Edge Wealth Management LLC	10,400	22,400	400	400	900	10,500	10,000	30,000	0	0	0
Edgestream Partners, L.P.	0	0	0	0	0	314,321	490,636	0	0	0	65,711
Edmond de Rothschild (Europe)	1,005	1,005	1,005	1,005	1,005	1,005	1,005	0	0	0	0
Edmond de Rothschild (Suisse) S.A.	4,200	4,200	4,200	4,200	4,200	4,200	4,200	0	0	0	0
Edmond de Rothschild Asset Management (France) S.A.	17,795	18,325	19,127	47,717	60,307	80,307	82,307	77,007	77,007	77,007	77,007
Eichler & Mehler Finanzdienstleistungen GmbH	0	0	0	0	23,000	43,000	43,000	43,000	0	0	0
Eightstone Oclaner Pte Ltd	14,822	14,822	0	0	0	0	0	0	0	0	0
Elan Capital-Partners GmbH	36,400	36,513	59,504	59,508	61,978	58,780	135,000	50,000	134,000	22,800	7,200
Elite Wealth Management Inc	1,754	1,754	1,754	1,754	0	0	0	0	0	0	0
Ellevest, Inc	0	0	0	0	0	0	0	0	0	0	0
Ellington Management Group, L.L.C.	0	0	0	22,000	0	0	0	0	0	0	0
EMC Gestion de Fortune S.A.	10,000	10,000	31,218	10,000	10,000	10,000	10,000	0	0	0	0
Engineers Gate Manager, L.P.	22,707	0	0	304,486	206,210	0	122,317	0	111,528	0	15,867
Ensign Peak Advisors, Inc	0	0	0	0	0	0	0	0	0	0	0
Enterprise Financial Services Corp	882	600	523	804	804	908	347	279	165	430	973
Envestnet Asset Management, Inc	875	79	96	79	79	79	80	0	0	0	0
Epsilon SGR SpA	0	0	0	0	0	0	0	0	0	0	90,455
Equitee Proprietary Markets, LLC	0	15,700	0	0	0	0	0	0	0	0	0
Esfera Capital Gestion SGIC, S.A.	0	0	0	0	0	0	0	0	0	0	0
Esferalia Capital EAFI	0	0	765	765	765	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44.6%	45.0%	43.2%	39.4%	38.7%	39.4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
D'Orazio & Associates, Inc	220	220	0	0	0	0
Dorval Asset Management	0	0	0	0	0	0
Dr. Bauer & Co. Vermögensmanagement GmbH	54,500	54,500	54,500	54,500	54,500	54,500
Dr. Kohlhaase Vermögensverwaltungsgesellschaft mbH	6,290	6,290	6,290	14,161	14,161	0
Dreman Value Management, L.L.C. NLE	0	0	0	0	0	0
DRW Securities, LLC	0	0	0	61,600	0	0
Dueemme International Luxembourg S.A. NLE	0	0	0	0	0	0
DUX Inversores, SGIC, S.A.	44,655	44,655	135,255	44,655	44,655	44,655
DVAM Vermögensverwaltung GmbH	0	0	0	0	0	0
DWS International GmbH	1,791,552	1,806,099	2,054,118	2,167,963	1,997,073	2,092,086
DWS Investment GmbH	2,661,057	2,535,964	5,241,539	12,814,544	5,105,276	5,064,617
DWS Investment Management Americas, Inc	0	0	0	6,217	38,834	35,434
DWS Investments UK Limited	11,260,355	10,825,705	11,377,044	11,676,064	14,563,112	10,959,968
Dynamic Technology Lab Pte Ltd	0	0	0	0	0	0
DZ Bank AG Deutsche Zentral-Genossenschaftsbank	4,098,340	4,056,642	4,078,541	3,815,124	3,541,387	3,269,272
DZ PRIVATBANK S.A.	0	0	0	0	0	0
E. Ohman J. or Fonder AB	0	0	0	0	0	0
Eagle West Group	0	0	0	0	26,000	0
EARNEST Partners, LLC	304	304	304	304	304	304
Eastspring Investments (Singapore) Limited	0	0	0	0	0	4,383
Eastspring Securities Investment Trust Co. Ltd	31,335	0	0	0	0	0
Eaton Vance Management	23,910	0	0	14,128	14,169	14,931
EB Portfoliomanagement GmbH	2,331	2,331	2,331	2,331	2,331	2,331
Ecofi Investissements S.A.	0	0	0	0	0	0
EdenTree Investment Management Limited	0	0	0	0	0	0
Edge Wealth Management LLC	0	0	0	0	0	0
Edgestream Partners, L.P.	0	231,630	0	0	491,968	245,807
Edmond de Rothschild (Europe)	0	0	0	0	0	0
Edmond de Rothschild (Suisse) S.A.	0	0	0	0	0	0
Edmond de Rothschild Asset Management (France) S.A.	77,007	75,007	75,007	525	525	525
Eichler & Mehler Finanzdienstleistungen GmbH	0	0	0	0	0	0
Eightstone Oclaner Pte Ltd	0	0	0	0	0	0
Elan Capital-Partners GmbH	5,000	7,500	8,600	8,600	8,600	7,600
Elite Wealth Management Inc	0	0	0	0	0	0
Ellevest, Inc	0	2,667	3,404	985	2,338	541
Ellington Management Group, L.L.C.	0	0	0	0	0	0
EMC Gestion de Fortune S.A.	0	0	0	0	0	0
Engineers Gate Manager, L.P.	35,300	0	11,353	0	0	0
Ensign Peak Advisors, Inc	0	84,000	84,000	84,000	72,650	72,650
Enterprise Financial Services Corp	973	801	920	506	506	406
Envestnet Asset Management, Inc	0	0	0	45,372	51,150	61,445
Epsilon SGR SpA	85,924	55,530	49,483	0	0	332,036
Equitec Proprietary Markets, LLC	0	0	0	0	0	0
Esfera Capital Gestion SGIC, S.A.	3,800	2,260	2,840	2,840	2,840	2,840
Esferalia Capital EAFI	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Essex Savings Bank	0	0	0	0	0	0	0	0	0	0	1,107
ETFS Management Aus Ltd	1,411	2,116	5,784	12,632	25,705	34,769	33,799	0	0	0	0
Ethenca Independent Investors S A	0	0	0	0	0	0	0	1,946,888	0	0	0
Etoile Gestion S A	0	0	71,898	72,909	43,415	86,407	86,407	22,084	14,949	9,618	9,618
Eurizon Capital S A	438,206	381,106	658,445	5,027	5,027	31,369	138,369	147,200	113,767	113,567	112,667
Eurizon Capital SGR S p A	0	0	0	0	0	116,904	138,004	135,648	128,728	123,007	117,416
European Depository Bank S A	0	0	0	4,380	4,380	4,380	4,380	4,380	4,380	4,380	0
Evercore Wealth Management, LLC	128	128	0	0	0	0	0	0	0	0	0
Evergreen Capital Management, LLC	0	0	0	0	0	12,268	0	0	14,069	12,963	0
Evli Fund Management Company Ltd	10,151	13,859	20,233	25,940	0	0	0	0	0	0	0
Evoke Advisors	0	0	0	0	0	0	0	0	0	0	0
Exane Asset Management	0	102,430	319,821	68,014	0	0	0	0	0	0	0
Exane Derivatives	1,842,399	1,790,829	1,425,426	595,980	1,575,812	1,443,798	1,656,219	2,165,364	1,397,299	916,885	1,588,820
Exchange Traded Concepts, LLC	0	0	0	0	0	0	0	0	0	0	0
ExodusPoint Capital Management, LP	0	0	0	0	0	0	0	0	0	5,649	1,080,038
FCF Advisors LLC	11,808	11,808	11,808	11,808	11,808	11,808	11,808	0	0	0	0
FDX Advisors, Inc	0	39,153	38,764	38,622	0	0	0	0	0	0	0
Federal Finance Gestion	592,004	226,121	240,621	640,000	475,000	565,012	842,694	1,049,635	1,631,871	1,801,510	359,304
Federated Hermes Equity Management Company of Pennsylvania	100,000	0	150,000	120,000	80,000	115,000	0	0	0	0	0
Federated Hermes Investment Management Company	90,776	86,713	127,480	124,166	120,427	120,427	114,588	109,464	109,464	109,464	109,464
Feri Trust GmbH	504,110	504,110	0	0	766,031	239,472	1,094,632	0	0	0	0
Ferris Capital, LLC	0	0	112	0	0	112	112	112	112	112	0
ficon börsebius Invest GmbH	0	0	0	0	0	0	0	0	0	45,000	47,150
Fideas CAPITAL	0	0	0	0	0	0	0	0	20,925	22,379	23,162
Fidecum AG	1,075,000	975,000	1,450,000	2,200,000	2,030,000	2,700,000	3,300,000	2,800,000	2,700,000	2,650,000	2,875,000
Fidelity International	583,622	0	0	0	0	915,281	0	0	0	0	0
Fidelity Management & Research Company LLC	0	74,486	74,486	74,486	74,486	74,486	74,486	354	1,209	0	282
Fideuram - Intesa Sanpaolo Private Banking Asset Management SGR S	0	2,800	11,800	11,800	11,800	0	0	0	0	0	0
Fideuram Asset Management (Ireland) dac	186,178	115,637	175,316	116,186	141,891	29,117	27,020	21,462	58,218	18,607	0
Fiduciary Trust Company of Canada	0	0	0	0	0	544	610	0	0	0	0
Fiduka Depotverwaltung GmbH	6,600	6,600	6,600	6,600	6,600	6,600	6,600	6,600	6,600	6,600	0
Fieldpoint Private Bank & Trust	0	0	0	0	0	0	0	0	0	0	0
Fiera Capital Corporation	0	0	0	0	0	0	0	0	0	0	3,995
Financial Architects Inc	3,300	0	1,830	1,680	1,430	100	100	0	0	0	0
Financière Arbevel	0	0	0	0	54,523	54,523	54,523	54,523	96,445	96,445	96,445
Fineco Patrimonios, S G I I C., S A	1,864	1,864	1,864	1,864	1,864	1,864	0	0	0	0	0
FineMark National Bank & Trust	157	0	0	0	0	0	0	0	0	0	0
FiNet Asset Management AG	230	230	230	230	230	230	0	0	0	0	0
FinEx Capital Management LLP	8,848	13,165	13,321	13,321	12,871	12,871	12,286	12,286	12,686	14,238	14,668
FinTrust Capital Advisors, LLC	0	0	0	0	0	0	0	0	0	260	0
Firestone Capital Management Inc	0	0	0	0	0	0	0	0	0	0	0
First Dallas Securities, Inc	0	17,850	17,850	0	0	0	0	0	0	0	0
First Pacific Advisors LP	0	0	0	0	0	0	0	0	0	0	0
First Private Investment Management KAG mbH	1,216	1,216	0	0	0	0	0	0	0	0	0
First Republic Investment Management, Inc	0	0	0	10,425	0	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44.6%	45.0%	43.2%	39.4%	38.7%	39.4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Essex Savings Bank	0	0	0	0	0	0
ETFS Management Aus Ltd	0	0	0	0	0	0
Ethena Independent Investors S A	0	0	0	0	0	0
Etoile Gestion S A	13,733	15,633	34,505	52,300	52,300	48,600
Eurizon Capital S A	125,088	136,688	79,794	175,526	204,932	172,523
Eurizon Capital SGR S p A	115,677	106,210	99,372	99,372	97,976	95,031
European Depositary Bank S A	0	0	0	0	0	0
Evercore Wealth Management, LLC	0	0	0	0	0	0
Evergreen Capital Management, LLC	0	0	0	0	0	0
Evli Fund Management Company Ltd	0	0	0	0	0	0
Evoke Advisors	243	0	248	145	85	85
Exane Asset Management	0	0	0	362,436	323,550	417
Exane Derivatives	1,904,749	576,469	827,014	713,858	404,200	357,024
Exchange Traded Concepts, LLC	0	0	0	0	1,566	0
ExodusPoint Capital Management, LP	327,240	418,837	0	48,011	49,023	81,284
FCF Advisors LLC	0	0	0	0	0	0
FDX Advisors, Inc	0	0	0	0	0	0
Federal Finance Gestion	0	0	1,424,896	440,922	274,273	477,341
Federated Hermes Equity Management Company of Pennsylvania	0	0	0	0	0	0
Federated Hermes Investment Management Company	109,464	109,464	109,464	0	0	0
Feri Trust GmbH	0	0	0	0	0	0
Ferris Capital, LLC	0	0	0	0	0	0
ficon börsebius Invest GmbH	47,150	47,150	45,000	45,000	45,000	55,000
Fideas CAPITAL	22,496	22,496	206,228	18,023	23,012	37,409
Fidecum AG	2,325,000	2,300,000	700,000	390,000	290,000	285,000
Fidelity International	0	0	0	2,102	1,996	2,082
Fidelity Management & Research Company LLC	1,372	13,762	34,521	47,961	57,358	77,620
Fideuram - Intesa Sanpaolo Private Banking Asset Management SGR S	0	0	8,800	8,800	8,800	8,800
Fideuram Asset Management (Ireland) dac	202,547	198,532	182,877	205,577	468,325	460,121
Fiduciary Trust Company of Canada	0	0	0	0	0	0
Fiduka Depotverwaltung GmbH	0	0	0	0	0	0
Fieldpoint Private Bank & Trust	0	0	0	0	0	3,160
Fiera Capital Corporation	4,191	0	0	0	0	0
Financial Architects Inc	0	0	0	0	0	0
Financière Arbevel	0	0	0	0	0	0
Fineco Patrimonios, S G I I C . S A	0	0	0	0	0	0
FineMark National Bank & Trust	0	0	0	0	0	0
FiNet Asset Management AG	0	0	0	0	0	0
FinEx Capital Management LLP	15,117	15,577	21,001	26,575	36,643	39,474
FinTrust Capital Advisors, LLC	0	0	0	0	0	0
Firestone Capital Management Inc	0	150	0	0	0	0
First Dallas Securities, Inc	0	0	0	0	0	0
First Pacific Advisors LP	75,587	75,587	75,587	75,587	0	0
First Private Investment Management KAG mbH	0	0	0	0	0	0
First Republic Investment Management, Inc	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
First Sentier Investments (U K) Ltd	0	183	2,026	2,026	2,026	2,026	2,026	2,026	2,026	2,026	2,026
First Trust Advisors L P	0	62,094	70,377	0	36,237	32,765	0	0	0	0	287,200
Fischer Francis Trees & Watts, Inc NLE	9,836	9,836	9,836	0	0	0	0	0	0	0	0
Fisher Investments	0	0	0	0	0	0	0	0	17,016	0	0
Flagship Harbor Advisors LLC	0	0	0	0	0	0	101	102	101	101	102
Flint Capital Management LLC	9,464	9,464	9,464	9,464	9,464	9,464	9,464	11,060	15,764	15,764	18,816
Florida State Board of Administration	0	1,001,725	1,001,725	1,001,725	1,001,725	1,166,304	1,166,304	1,166,304	1,166,304	998,346	998,346
Flossbach von Storch AG	0	0	0	190,001	0	0	0	0	0	0	0
FNy Capital Management LP	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	0	0	0
FNy Investment Advisers LLC	0	0	0	0	0	0	267,510	0	0	113,000	0
Focused Wealth Management, Inc	7,128	6,128	6,145	8,161	5,645	39,591	88,917	95,227	60,879	3,588	3,590
Folger Hill Asset Management LLC NLE	0	20,554	24,659	0	0	0	0	0	0	0	0
Fondsmæglerselskabet Maj Invest A/S	3,556	0	0	29,706	29,706	38,341	0	0	0	0	0
Fora Capital LLC	0	0	0	0	0	0	0	0	0	0	0
Foresters Investment Management Company, Inc	0	0	13,456	0	0	0	0	0	0	0	0
Första AP-Fonden	0	0	0	0	0	0	0	0	0	0	0
Fosun International Ltd	0	0	0	0	0	0	0	787,000	793,000	793,000	861,000
Founders Capital Management, Inc	0	1,800	2,700	2,700	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Fox Run Management, L L C	0	0	29,900	23,700	0	0	0	0	0	0	0
FPM Frankfurt Performance Management AG	343,333	348,333	479,999	416,000	426,000	411,000	305,000	305,000	300,000	300,000	230,000
FPS Vermögensverwaltung GmbH	54,600	54,600	81,900	81,900	189,300	189,300	215,400	215,400	273,400	273,400	534,500
Frankfurt-Trust Investment-Gesellschaft mbH NLE	2,824,980	2,804,980	4,050,000	4,565,700	3,804,522	5,904,600	0	0	0	0	0
Franklin Advisers, Inc	0	0	0	0	28,472	30,069	30,696	26,740	31,171	0	0
Franklin Advisory Services, LLC	0	0	0	0	0	0	0	0	0	62,373	64,112
Franklin Equity Group	0	0	0	0	0	0	0	0	0	8,576	8,576
Franklin Mutual Advisers, LLC	0	0	190,631	190,631	190,631	11,129,230	11,340,042	13,476,541	14,946,690	12,445,499	12,340,423
Franklin Templeton International Services SARL	0	0	0	0	0	0	0	0	0	0	0
Franklin Templeton Investment Management Ltd	0	0	0	0	50,555	81,046	0	0	0	0	0
Franklin Templeton Portfolio Advisers, Inc	0	0	0	0	28,472	30,069	30,696	26,740	31,171	62,373	64,112
Franklin Templeton SinoAm Securities Investment Management	0	0	0	0	0	0	17,641	17,641	0	0	0
Fred Alger Management, LLC	0	0	616	1,165	2,242	2,952	3,904	4,403	3,342	0	0
Fubon Asset Management Company Ltd	0	0	0	1,411	1,336	979	744	744	1,148	1,148	1,148
FundLogic SAS	0	1,837	0	0	0	0	0	0	0	0	0
Furkert & Schneider Private Asset Management KG	0	0	5,580	5,580	5,580	5,580	5,580	5,580	5,580	5,580	0
FutureAdvisor	0	0	0	0	0	0	28	28	0	0	0
FV Frankfurter Vermögen AG	0	0	0	0	0	0	0	0	0	0	0
FWU Invest S A	0	0	0	0	0	0	0	0	0	0	0
G I I C Fineco S G I I C, S A U	64,495	64,495	57,878	15,868	26,659	58,559	84,590	23,621	60,745	0	0
GA Investment Management	1,000	500	0	0	0	0	0	0	0	0	0
Gabelli Funds, LLC	45,000	46,000	69,500	53,000	53,000	59,000	58,000	58,000	46,000	46,000	46,000
Gainplan LLC	11,400	0	0	0	15,000	0	0	0	0	0	0
GAM (Luxembourg) S A	0	0	0	45,911	28,044	112,394	41,754	0	0	32,135	0
GAM Capital Management (Switzerland) AG	0	0	0	0	0	2,003,810	2,485,886	2,216,834	1,083,980	159,726	0
GAM International Management Ltd	0	0	0	45,911	28,044	43,364	0	0	0	32,135	0
GAM Investment Management (Switzerland) AG	0	0	1,183,111	1,183,111	1,575,434	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
First Sentier Investments (U K) Ltd	2,026	907	907	632	527	0
First Trust Advisors L P	393,491	147,243	0	0	249,446	275,228
Fischer Francis Trees & Watts, Inc NLE	0	0	0	0	0	0
Fisher Investments	0	0	0	0	0	0
Flagship Harbor Advisors LLC	102	103	103	102	102	0
Flinton Capital Management LLC	18,816	18,816	18,816	18,816	18,816	18,816
Florida State Board of Administration	998,346	998,346	977,956	977,956	977,956	977,956
Flossbach von Storch AG	0	0	0	0	0	0
FNY Capital Management LP	0	0	0	0	0	0
FNY Investment Advisers LLC	153,279	0	0	0	200,000	5,000
Focused Wealth Management, Inc	3,590	28,090	33,090	33,090	33,090	30,366
Folger Hill Asset Management LLC NLE	0	0	0	0	0	0
Fondsmæglerselskabet Maj Invest A/S	0	0	0	0	0	0
Fora Capital LLC	0	0	86,390	0	0	0
Foresters Investment Management Company, Inc	0	0	0	0	0	0
Första AP-Fonden	0	0	184,964	242,444	303,942	321,895
Fosun International Ltd	873,000	1,323,000	1,257,000	557,000	552,000	517,000
Founders Capital Management, Inc	2,000	2,000	2,000	2,000	2,000	2,000
Fox Run Management, L L C	0	0	0	0	0	13,108
FPM Frankfurt Performance Management AG	230,000	230,000	122,000	100,000	100,000	100,000
FPS Vermögensverwaltung GmbH	534,500	668,000	668,000	813,700	813,700	106,400
Frankfurt-Trust Investment-Gesellschaft mbH NLE	0	0	0	0	0	0
Franklin Advisers, Inc	0	236,555	236,555	539,136	539,136	539,136
Franklin Advisory Services, LLC	52,590	50,013	63,754	82,716	84,657	82,012
Franklin Equity Group	8,576	7,847	6,556	7,784	7,784	5,041
Franklin Mutual Advisers, LLC	12,276,874	12,248,093	13,390,822	13,434,458	13,458,611	13,609,622
Franklin Templeton International Services SARL	0	0	0	0	539,136	539,136
Franklin Templeton Investment Management Ltd	0	0	0	0	0	0
Franklin Templeton Portfolio Advisers, Inc	52,590	50,013	63,754	82,716	83,863	81,264
Franklin Templeton SinoAm Securities Investment Management	0	0	0	0	0	0
Fred Alger Management, LLC	0	0	0	0	0	0
Fubon Asset Management Company Ltd	0	0	0	1,121	1,121	1,210
FundLogic SAS	0	0	0	0	0	0
Furkert & Schneider Private Asset Management KG	0	0	0	0	0	0
FutureAdvisor	0	0	0	0	0	0
FV Frankfurter Vermögen AG	0	10,000	10,000	0	0	0
FWU Invest S A	0	0	0	0	0	40,443
G I I C Fineco S G I I C, S A U	0	0	0	0	0	0
GA Investment Management	0	0	0	0	0	0
Gabelli Funds, LLC	46,000	46,000	46,000	46,000	46,000	46,000
Gainplan LLC	0	0	0	0	0	0
GAM (Luxembourg) S A	36,583	62,145	0	0	0	92,359
GAM Capital Management (Switzerland) AG	0	0	0	0	0	0
GAM International Management Ltd	0	0	0	0	0	0
GAM Investment Management (Switzerland) AG	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41.0%	51.7%	46.2%	46.6%	49.6%	45.8%	44.0%	50.7%	49.0%	43.4%	45.3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Gamma Financials AG	0	0	0	0	0	0	0	0	0	60,000	60,000
GAP Vermögensverwaltung GmbH	0	0	3,000	3,000	3,000	0	0	0	0	0	0
Gargoyle Asset Management, LLC	0	0	0	0	0	0	0	0	0	61,100	61,100
Gateway Investment Advisers, LLC	1,792	1,792	0	0	0	0	0	0	0	0	0
Gator Capital Management, LLC	0	0	0	0	0	30,000	28,500	54,000	60,000	60,000	60,000
Gemmer Asset Management LLC	0	0	0	0	0	144	90	200	166	112	144
Genios Wealth Management Inc	625	625	625	625	625	425	125	0	0	0	0
Generali Insurance Asset Management S p A SGR	107,904	107,908	118,018	158,107	540,271	1,317,781	1,404,334	324,998	56,154	85,168	85,168
Generali Investments Partners S p A SGR	0	0	0	0	0	0	0	0	0	0	0
Generali PTE S A	441,818	441,818	441,818	441,818	0	0	0	0	0	0	0
Geode Capital Management, L L C	0	0	0	4,754,655	4,938,188	5,316,991	5,335,579	5,527,953	5,921,444	251,600	0
Gesinter S G I I C , S A	8,000	8,000	18,000	20,000	22,000	13,000	27,000	27,863	41,900	0	0
Gesturis Asset Management S G I I C , S A	13,860	17,360	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	0
Gestifonsa S G I I C , S A	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	0	0
Gestión Santander Mexico S A de C V	6,370	0	0	0	0	0	0	0	0	0	0
GET Capital AG	0	0	0	0	0	0	0	773	0	0	0
GFS Advisors LLC	0	13,281	13,281	13,281	13,281	13,281	13,281	0	0	0	0
Gideon Capital Advisors, Inc	0	0	30,628	0	0	0	0	11,764	0	0	12,356
Gies & Heimbürger GmbH	15,400	0	0	0	0	0	0	0	0	0	0
Gifford Fong Associates	0	0	0	0	0	0	0	50,000	45,000	45,000	45,000
Glassman Wealth Services LLC	0	0	0	0	0	0	0	0	0	0	0
Glen Harbor Capital Management LLC	5,408	5,408	5,408	5,408	5,408	5,408	5,408	6,320	9,008	9,008	10,752
Glenmede Investment Management LP	3,299	0	0	29,470	4,825	4,825	0	0	3,002	3,273	1,359
GLG Partners LP	7,501	7,501	7,501	7,501	7,501	7,501	7,501	7,501	0	0	0
Global Index Advisors, Inc NLE	13,746	10,920	14,493	14,493	14,493	14,493	14,493	0	0	0	0
Global X Management Company LLC NLE	611	611	611	611	906	1,175	0	0	0	0	0
GO ETF Solutions LLP NLE	38,769	38,769	38,769	38,769	38,769	0	0	0	0	0	0
Gold Coin Invest AG	15,000	0	0	10,000	0	0	0	0	0	0	0
Goldman Sachs & Company, Inc	4,654,361	4,297,693	5,926,377	5,877,456	504,866	501,400	784,501	920,885	1,978,860	1,328,531	1,118,319
Goldman Sachs Asset Management International	9,625	10,160	14,523	16,823	17,554	16,218	15,266	12,385	12,385	12,385	12,385
Goldman Sachs Asset Management, L P	2,876,116	4,275,382	366,587	927,015	1,225,818	1,059,382	1,418,330	1,844,496	1,713,056	1,827,175	1,226,915
Goldman Sachs International	29,081,241	32,399,992	23,114,206	27,451,638	25,328,726	21,986,881	27,346,959	25,979,940	32,199,260	44,344,890	38,535,680
GPA Portfolio Management AG	0	0	0	0	3,000	0	0	0	0	0	0
GQG Partners, LLC	0	0	0	0	0	0	0	0	0	0	0
Graham Capital Management, L P	0	0	0	0	0	0	0	0	0	0	0
Grantham Mayo Van Otterloo & Co LLC	20,328	19,967	0	0	0	0	0	0	0	0	0
Graubündner Kantonalbank	0	0	0	0	0	0	0	274	156	682	653
Greenleaf Trust	0	0	0	279	0	0	0	24,298	0	12,912	0
Greenwich Ivy Capital LLC	0	0	0	0	0	0	0	0	0	0	0
Greiff capital management AG	0	0	0	10,000	0	0	0	0	0	0	0
GRESHAM Banque Privée	33,865	36,770	53,078	53,078	53,372	54,964	56,475	56,475	55,303	48,322	50,257
Grohmann & Weinrauter Vermögens Management GmbH	40,295	36,331	29,598	30,393	6,531	6,531	6,531	6,531	31,668	19,080	13,924
Grossbötzl, Schmitz, Lomparski & Partner International S à r l	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	0	0	0
Group One Trading, L P	957,227	28,762	579,105	787,003	936,847	558,043	614,871	899,819	1,205,878	1,781,913	1,700,243
Groupama Asset Management	121,302	117,484	127,638	144,657	93,645	93,645	93,645	93,645	93,645	53,435	53,435

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Gamma Financials AG	60,000	90,000	90,000	0	0	0
GAP Vermögensverwaltung GmbH	0	0	0	0	0	0
Cargoyle Asset Management, LLC	61,100	24,900	24,900	24,900	24,900	24,900
Gateway Investment Advisers, LLC	0	0	0	0	0	0
Gator Capital Management, LLC	60,000	60,000	60,000	60,000	28,500	28,500
Gemmer Asset Management LLC	0	0	286	159	159	159
Genesos Wealth Management Inc	0	0	0	0	0	0
Generali Insurance Asset Management S p A SGR	123,285	356,990	104,483	87,518	80,087	59,673
Generali Investments Partners S p A SGR	7,270	9,293	9,091	9,091	9,091	507
Generali PTE S A	0	0	0	0	0	0
Geode Capital Management, L L C	0	7,050,302	7,106,961	7,120,739	7,118,940	7,640,232
Gesinter S G I I C , S A	0	0	0	8,500	0	0
Gesturis Asset Management S G I I C , S A	0	0	0	0	0	0
Gestifonsa S G I I C , S A	0	0	0	0	0	0
Gestión Santander Mexico S A de C V	0	0	0	0	0	0
GET Capital AG	0	0	0	0	0	0
GFS Advisors LLC	0	0	0	0	0	0
Gideon Capital Advisors, Inc	0	0	0	0	0	0
Gies & Heimbürger GmbH	0	0	0	0	0	0
Gifford Fong Associates	45,000	45,000	45,000	45,000	45,000	45,000
Glassman Wealth Services LLC	0	37	79	72	0	0
Glen Harbor Capital Management LLC	10,752	10,752	10,752	10,752	10,752	10,752
Glenmede Investment Management LP	2,635	26,303	26,303	29,471	29,857	29,263
GLG Partners LP	0	0	0	0	0	0
Global Index Advisors, Inc NLE	0	0	0	0	0	0
Global X Management Company LLC NLE	0	0	0	0	0	0
GO ETF Solutions LLP NLE	0	0	0	0	0	0
Gold Coin Invest AG	0	0	0	0	0	0
Goldman Sachs & Company, Inc	674,098	449,514	923,685	59,456	215,637	62,779
Goldman Sachs Asset Management International	12,385	12,385	12,385	12,385	12,385	202,140
Goldman Sachs Asset Management, L P	1,755,997	1,797,075	793,773	1,586,108	1,711,704	3,172,097
Goldman Sachs International	33,458,750	30,476,979	33,800,513	37,133,518	28,137,385	21,883,589
GPA Portfolio Management AG	0	0	0	0	0	0
GQG Partners, LLC	28,950	23,934	0	0	0	0
Graham Capital Management, L P	0	0	1,000,000	700,000	700,000	0
Grantham Mayo Van Otterloo & Co LLC	0	0	0	0	0	0
Graubündner Kantonalbank	498	632	359	497	0	0
Greenleaf Trust	38,240	0	0	0	0	0
Greenwich Ivy Capital LLC	0	0	4,209	4,209	0	0
Greiff capital management AG	0	0	8,550	11,771	0	0
GRESHAM Banque Privée	47,192	47,192	48,678	47,469	46,713	45,450
Grohmann & Weinrauter Vermögens Management GmbH	13,924	13,924	109,192	92,687	59,917	83,959
Grossbötzl, Schmitz, Lomparski & Partner International S à r l	0	0	0	0	0	0
Group One Trading, L P	1,653,387	1,715,515	754,906	248,057	521,883	0
Groupama Asset Management	53,435	53,435	53,435	53,435	53,435	53,435

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Grupo Catalana Occidente, S A	28,800	28,800	28,800	28,800	28,800	28,800	0	0	0	0	0
GS&P Kapitalanlagegesellschaft S A	3,000	3,000	3,000	0	0	0	0	0	0	0	0
GSA Capital Partners LLP	0	0	0	0	0	0	0	0	0	18,416	0
GSD Gestion S A	0	5,110	7,665	7,665	7,665	7,665	7,665	7,665	7,665	7,665	7,665
GSP asset management GmbH	0	0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Guggenheim Investments	69,758	63,708	49,048	43,780	0	33,529	23,835	29,116	0	0	0
Guliver Anlageberatung GmbH	2,000	0	0	0	0	0	0	0	0	0	0
Gupta Wealth Management Llc NLE	300	300	0	0	0	0	0	0	0	0	0
Gutmann Finanz Strategien AG	1,604	1,604	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
GVC Gaesco Beka S V S A	0	5,010	6,045	6,045	6,000	5,900	5,900	8,999	13,672	3,893	3,893
GVC Gaesco Gestion SGHC S A	342,705	342,705	476,467	476,467	476,467	390,287	390,287	595,178	855,313	495,000	495,000
Hamburg Commercial Bank AG	0	3,260	3,260	3,260	3,260	3,260	0	0	0	0	0
Handelsbanken Asset Management	231,916	231,916	231,916	231,916	231,916	231,916	0	0	0	478,864	456,351
HANSAINVEST Hanseatische Investment GmbH	0	0	0	0	0	0	0	38,500	62,000	62,000	62,000
HanseMerkur Trust AG	13,945	13,945	13,945	0	0	0	0	0	0	0	0
HAP Trading, LLC	122,168	14,789	21,223	24,259	0	33,186	46,624	32,438	0	0	0
Harbor Investment Advisory, LLC	0	0	0	0	0	0	0	0	0	0	0
Harness Asset Management Pty Ltd	0	0	0	0	0	0	0	0	0	0	67,400
Harvest Fund Management Co., Ltd	38,000	50,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000	98,000
Harvest Portfolios Group Inc	0	0	0	0	0	0	3,820	3,820	0	0	0
Hauck & Aufhäuser Asset Management Services S à r l NLE	69,635	69,635	69,635	69,635	69,635	0	0	0	0	0	0
Hauck & Aufhäuser Fund Services S A	26,670	26,670	25,000	25,000	37,400	37,735	41,735	41,735	41,735	12,735	37,735
Hauck Aufhäuser Lampe Privatbank AG	22,564	22,564	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
Helvetia Versicherungen	160,000	160,000	240,000	240,000	240,000	240,000	240,000	240,000	230,000	230,000	180,000
Hennessy Advisors, Inc	0	5,000	0	0	0	0	0	0	0	0	0
Henry James International Management, Inc	0	0	0	0	0	0	0	51,276	0	0	0
Heungkuk Asset Management Company Ltd	5,000	5,000	7,500	7,500	7,500	10,000	10,000	10,000	12,500	12,500	12,500
Hexavest Inc	383	383	383	383	383	383	383	383	383	383	383
Highland Capital Management, LLC	40,422	37,132	39,262	39,662	39,062	35,037	35,037	35,087	35,087	36,037	36,047
Hightower Advisors, LLC	3,319	3,455	0	0	0	1,084	1,202	1,164	910	0	0
HINKEL & CIE Vermögensverwaltung AG	0	0	0	0	0	0	0	5,000	0	0	0
HNA Capital Group Co., Ltd	0	0	0	0	244,500	244,500	244,500	0	0	0	0
HNA Group Co., Ltd	41,938,864	65,595,738	204,670,642	204,670,642	204,670,642	180,868,812	157,937,965	157,937,965	157,937,965	99,612,266	99,612,266
Hodges Capital Management, Inc	273,850	428,250	54,425	20,175	0	0	0	0	0	0	0
Hollencrest Capital Management	0	0	0	0	0	15,000	15,000	15,000	15,000	15,000	15,000
HONESTAS Finanzmanagement GmbH	0	0	0	0	0	0	0	0	0	0	0
Honkamp Krueger Financial Services, Inc	0	0	0	0	0	0	0	40	0	0	0
Horizons ETFs Management (Canada) Inc	32,186	25,548	39,380	45,528	62,419	71,292	43,737	61,920	59,968	0	0
Horizons ETFs Management (US) LLC	19,250	19,338	17,000	19,358	24,072	32,981	30,069	30,069	29,068	29,068	29,068
Hourglass Capital, LLC	173,500	209,000	210,250	210,250	210,250	210,250	0	0	0	0	0
HÖVELRAT Holding AG	30,000	30,000	45,000	45,000	45,000	55,000	55,000	55,000	55,000	70,000	90,000
Howe and Rusling, Inc	0	500	0	0	0	0	0	0	0	0	0
HPM Hanseatische Portfoliomanagement GmbH	1,473	1,473	1,473	1,473	0	0	0	0	0	0	0
HRT Financial LP	0	0	0	0	0	0	0	0	0	23,512	0
HSBC Global Asset Management (France) S A	597,748	605,420	883,130	856,200	856,200	797,300	613,391	532,316	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Grupo Catalana Occidente, S A	0	0	0	0	0	0
GS&P Kapitalanlagegesellschaft S A	0	0	0	0	0	0
GSA Capital Partners LLP	17,625	0	57,105	0	0	0
GSD Gestion S A	7,665	7,665	7,665	7,665	7,665	7,665
GSP asset management GmbH	25,000	25,000	63,000	63,000	63,000	114,000
Guggenheim Investments	0	0	0	0	0	12,801
Guliver Anlageberatung GmbH	0	0	0	0	0	0
Gupta Wealth Management Llc NLE	0	0	0	0	0	0
Gutmann Finanz Strategien AG	1,100	1,800	3,900	3,900	3,900	3,900
GVC Gaesco Beka S V S A	6,893	6,893	11,793	14,793	17,093	15,093
GVC Gaesco Gestion SGHC S A	319,000	469,000	439,000	439,000	414,000	414,000
Hamburg Commercial Bank AG	0	0	0	0	0	0
Handelsbanken Asset Management	493,743	460,150	428,722	412,955	505,152	691,479
HANSAINVEST Hanseatische Investment GmbH	62,000	62,000	62,000	62,000	62,000	0
HanseMerkur Trust AG	54,518	83,089	83,089	88,570	113,830	113,830
HAP Trading, LLC	0	0	0	0	0	0
Harbor Investment Advisory, LLC	0	1	3,195	3,195	3,195	5,770
Harness Asset Management Pty Ltd	67,400	67,400	67,400	67,400	67,400	67,400
Harvest Fund Management Co., Ltd	98,000	50,000	50,000	50,000	40,000	40,000
Harvest Portfolios Group Inc	0	0	0	0	0	0
Hauck & Aufhäuser Asset Management Services S à r l NLE	0	0	0	0	0	0
Hauck & Aufhäuser Fund Services S A	12,735	12,735	12,735	12,735	12,735	12,735
Hauck Aufhäuser Lampe Privatbank AG	30,000	30,000	30,000	30,000	30,000	30,000
Helvetia Versicherungen	180,000	180,000	180,000	180,000	180,000	180,000
Hennessy Advisors, Inc	0	0	0	0	0	0
Henry James International Management, Inc	0	0	0	0	0	0
Heungkuk Asset Management Company Ltd	12,500	12,500	12,500	12,500	0	0
Hexavest Inc	383	0	0	0	0	0
Highland Capital Management, LLC	35,547	35,247	40,147	39,237	39,014	38,914
Hightower Advisors, LLC	0	0	0	0	0	0
HINKEL & CIE Vermögensverwaltung AG	0	0	0	0	0	0
HNA Capital Group Co., Ltd	0	0	0	0	0	0
HNA Group Co., Ltd	99,612,266	99,612,266	99,612,266	0	0	0
Hodges Capital Management, Inc	0	0	0	0	0	0
Hollencrest Capital Management	15,000	15,000	15,000	15,000	15,000	0
HONESTAS Finanzmanagement GmbH	0	0	18,800	10,000	10,000	10,000
Honkamp Krueger Financial Services, Inc	0	0	0	0	0	0
Horizons ETFs Management (Canada) Inc	0	0	0	0	0	0
Horizons ETFs Management (US) LLC	29,068	29,068	29,068	29,068	0	0
Hourglass Capital, LLC	0	0	0	0	0	0
HÖVELRAT Holding AG	90,000	90,000	90,000	90,000	90,000	90,000
Howe and Rusling, Inc	0	0	0	0	0	0
HPM Hanseatische Portfoliomanagement GmbH	0	0	0	0	0	0
HRT Financial LP	0	47,102	0	0	0	0
HSBC Global Asset Management (France) S A	0	0	0	0	604,628	644,954

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41.0%	51.7%	46.2%	46.6%	49.6%	45.8%	44.0%	50.7%	49.0%	43.4%	45.3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
HSBC Global Asset Management (Hong Kong) Limited	30,000	0	0	0	0	0	74,024	0	0	0	5,363
HSBC Global Asset Management (International) Limited	458,645	456,350	693,301	716,510	802,436	137,590	135,293	145,293	136,495	145,267	154,472
HSBC Global Asset Management (UK) Limited	9,331,203	13,270,177	22,506,681	19,306,849	30,125,578	7,347,143	7,747,921	4,125,802	4,483,750	4,238,120	4,184,726
HSBC Global Asset Management Deutschland GmbH	1,571,087	1,846,324	3,060,743	2,043,269	2,574,968	1,940,225	1,788,688	2,180,337	2,449,337	1,477,438	1,838,709
HuaAn Fund Management Co., Ltd	33,800	33,800	33,800	33,800	33,800	33,800	46,500	46,500	77,200	77,200	134,500
Hudson Bay Capital Management LP	675,000	52,900	0	0	0	56,100	0	0	0	0	0
Hudson Executive Capital LP	0	0	0	0	0	0	0	59,591,476	64,861,476	64,861,476	64,861,476
HUK-COBURG Asset Management GmbH	0	0	0	0	0	0	0	0	0	0	8,344
Huntington Private Financial Group	0	616	616	616	0	0	0	0	0	0	0
Hutchin Hill Capital, LP NLE	0	0	0	245,328	0	0	0	0	0	0	0
I C M Investment Bank AG	0	0	0	0	10,000	10,100	0	0	0	0	0
IAM Independent Asset Management S A	0	59,976	64,972	0	0	0	0	0	0	0	0
IBCO Gestão de Patrimônios, S A	23,157	18,408	18,408	18,408	18,408	18,408	18,408	18,408	18,408	0	0
Ibercaja Gestión S G I I C , S A	149,585	149,585	228,117	228,117	228,117	224,107	224,107	154,107	154,107	0	0
ICW Group	100,000	100,000	150,000	150,000	150,000	150,000	0	0	0	0	0
ID-Sparinvest A/S	35,326	39,108	73,788	73,788	92,262	92,262	92,262	92,262	114,378	108,763	113,988
IFAM Capital	0	0	0	0	0	1,000	1,000	0	0	0	0
IFM Independent Fund Management AG	8,000	8,000	10,000	10,000	10,000	10,000	10,000	79,000	10,000	10,000	0
IHT Wealth Management, LLC	246	246	246	246	0	0	0	0	0	0	0
Ilmarinen Mutual Pension Insurance Company	160,000	160,000	160,000	160,000	0	0	0	0	0	0	0
IM Gestão de Ativos - Sociedade Gestora de Organismos de Investiment	0	0	31,714	29,500	39,106	48,133	57,712	56,412	0	0	0
Imantia Capital	5,758	5,758	5,758	5,758	5,758	5,758	0	0	0	0	0
IMC Chicago, LLC	0	0	0	0	0	0	0	0	0	0	39,696
Impact Asset Management GmbH	0	0	0	0	0	0	0	0	0	0	0
Impax Asset Management LLC	9,019	10,979	10,979	17,271	18,918	22,025	24,418	25,854	0	0	0
InCapital GmbH	10,000	30,000	35,000	30,000	33,000	24,000	24,000	50,000	32,000	24,000	24,000
Independent Financial Partners	15,170	13,080	2,161	1,510	1,161	1,161	862	1,796	1,202	67	67
IndexIQ Advisors LLC	22,637	49,619	73,367	69,035	80,956	99,457	74,780	69,038	60,942	58,085	51,501
Informed Portfolio Management AB	25,161	25,161	26,747	26,747	26,747	26,747	26,747	26,747	26,747	26,747	0
imprimio invest	8,000	8,000	9,900	9,900	9,900	9,900	9,900	9,900	9,900	9,900	9,900
Insight Investment Management (Global) Limited	16,319	17,044	20,196	17,826	17,264	18,235	12,207	0	0	239,633	235,665
Insingerilissen Asset Management N V	0	0	0	0	0	0	0	0	271,820	271,820	296,092
Insingerilissen Bankiers N V	0	0	0	0	0	0	0	20,656	20,656	20,656	20,656
Integral Derivatives LLC	15,698	0	0	29,038	20,338	0	0	0	0	0	0
Intellectus Partners, LLC	45,857	43,757	67,160	70,152	68,989	66,989	66,541	69,172	35,386	37,386	36,537
Intercontinental Wealth Advisors, LLC	0	0	0	0	0	0	0	0	2,290	2,290	2,290
Inversis Gestión, S A , SGIIC	0	8,600	4,300	0	0	0	2,588	2,588	2,588	2,588	0
Invesco Advisers, Inc	913	0	0	0	0	0	0	0	0	87,540	84,272
INVESCO Asset Management (Japan) Ltd	32,650	30,882	30,882	30,882	27,359	24,925	21,075	16,591	14,848	11,446	9,533
INVESCO Asset Management Deutschland GmbH	136,780	152,712	195,855	194,007	218,155	200,651	186,790	186,790	186,790	186,790	186,790
INVESCO Asset Management Limited	80,000	0	0	0	70,000	120,000	160,000	185,000	238,300	215,000	178,450
Invesco Canada Ltd	0	0	0	0	0	0	0	379	7,877	8,521	11,157
Invesco Capital Management LLC	286,690	324,588	325,029	325,373	322,173	328,622	346,362	373,792	412,629	725,526	673,522
Invesco Management Group, Inc	16,473	18,643	9,719	10,253	9,006	15,890	13,711	13,595	16,822	0	0
Invest Gestão de Activos, S G F I M , S A	0	0	0	0	0	0	5,000	5,000	5,000	5,000	5,000

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
HSBC Global Asset Management (Hong Kong) Limited	0	0	0	9,550	11,008	76,569
HSBC Global Asset Management (International) Limited	154,472	128,452	132,383	144,701	143,666	87,582
HSBC Global Asset Management (UK) Limited	2,966,850	7,234,082	999,531	2,067,188	3,951,313	7,823,677
HSBC Global Asset Management Deutschland GmbH	2,139,320	2,104,090	1,828,588	919,941	795,438	323,286
HuaAn Fund Management Co., Ltd	134,500	116,900	116,900	341,400	341,400	240,400
Hudson Bay Capital Management LP	0	0	0	0	0	0
Hudson Executive Capital LP	64,861,476	64,861,476	64,861,476	64,861,476	64,861,476	66,488,476
HUK-COBURG Asset Management GmbH	8,344	8,344	8,344	8,344	8,344	8,344
Huntington Private Financial Group	0	0	0	0	0	0
Hutchin Hill Capital, LP NLE	0	0	0	0	0	0
I C M Investment Bank AG	10,000	6,500	6,000	2,000	0	55,500
IAM Independent Asset Management S A	0	0	0	0	0	0
IBCO Gestão de Patrimônios, S A	0	0	0	0	0	0
Ibercaja Gestión S G I I C , S A	0	0	0	0	0	0
ICW Group	0	0	0	0	0	0
ID-Sparinvest A/S	113,961	113,961	113,961	69,873	71,196	79,314
IFAM Capital	0	0	0	0	0	0
IFM Independent Fund Management AG	0	0	0	8,500	10,500	10,500
IHT Wealth Management, LLC	0	0	0	0	0	0
Ilmarinen Mutual Pension Insurance Company	0	0	0	0	0	0
IM Gestão de Ativos - Sociedade Gestora de Organismos de Investiment	0	0	0	0	0	0
Imantia Capital	0	0	0	0	0	0
IMC Chicago, LLC	0	0	0	0	0	0
Impact Asset Management GmbH	0	0	0	0	25,825	13,622
Impax Asset Management LLC	0	0	0	0	0	0
InCapital GmbH	12,000	12,000	12,000	12,000	12,000	12,000
Independent Financial Partners	169	0	0	0	0	0
IndexIQ Advisors LLC	46,262	88,400	92,651	101,174	100,373	95,628
Informed Portfolio Management AB	0	0	0	0	0	0
imprimo invest	9,900	20,000	20,000	0	0	0
Insight Investment Management (Global) Limited	227,144	224,372	206,842	227,085	208,370	208,370
InsingerGlissen Asset Management N V	296,092	296,092	296,092	296,092	296,092	296,092
InsingerGlissen Bankiers N V	0	0	0	13,592	25,121	20,029
Integral Derivatives LLC	0	0	0	0	0	0
Intellectus Partners, LLC	36,537	34,537	33,537	29,537	29,537	17,905
Intercontinental Wealth Advisors, LLC	0	0	0	0	0	0
Inversis Gestión, S A , SGIIC	0	0	0	0	0	0
Invesco Advisers, Inc	84,272	182,475	187,614	205,609	181,623	209,660
INVESCO Asset Management (Japan) Ltd	8,306	8,306	9,365	12,165	13,500	15,404
INVESCO Asset Management Deutschland GmbH	186,790	254,701	258,137	258,137	346,925	353,459
INVESCO Asset Management Limited	57,000	0	0	0	38	28
Invesco Canada Ltd	9,712	1,697	1,616	769	801	801
Invesco Capital Management LLC	628,790	592,579	606,482	468,207	447,209	436,225
Invesco Management Group, Inc	0	0	0	0	0	0
Invest Gestão de Activos, S G F I M , S A	5,000	5,000	5,000	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41.0%	51.7%	46.2%	46.6%	49.6%	45.8%	44.0%	50.7%	49.0%	43.4%	45.3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Investitori SGR S p A	7,000	7,000	7,000	7,000	7,000	7,000	0	0	0	0	0
IPCConcept (Luxemburg) S A	7,200	13,200	13,200	7,200	61,200	61,200	61,200	61,200	0	0	0
IPG Investment Advisors, LLC	0	0	0	0	61,350	0	0	0	85,000	70,810	0
IQAM Invest GmbH	2,241	2,241	2,241	2,241	2,241	2,241	2,241	2,241	2,241	2,241	2,241
IRC Wealth	0	0	0	0	19,013	19,013	19,013	19,013	18,638	18,638	19,013
Irish Life Investment Managers Ltd	197,143	195,333	268,078	296,892	296,892	292,620	240,206	190,879	134,291	152,353	152,353
IST Investmentsstiftung	1,540	1,609	2,515	2,598	2,621	2,455	2,583	2,613	2,669	2,649	2,749
J O Hambro Capital Management Limited	469,150	469,150	469,150	0	0	0	0	0	0	0	0
J P Morgan Private Investments Inc (JPMPPI)	3,897	0	0	0	0	0	0	0	0	0	0
J P Morgan Securities LLC	48,965	18,342	22,963	22,142	22,842	813,417	1,020,996	798,909	8,280	8,280	15,682
J P Morgan Securities plc	11,482,924	15,724,684	9,410,803	5,729,326	0	9,223,675	18,922,987	0	0	1,786,120	10,362,770
Jackson National Asset Management, LLC	0	0	0	0	0	0	0	54,000	0	0	0
Jackson Square Partners, LLC	3,650	3,650	3,650	3,650	0	0	0	0	0	0	0
Jacobi Capital Management, LLC	325	325	325	325	325	325	325	325	325	325	325
James Investment Research Inc	0	0	0	93,000	0	0	0	0	0	0	0
Jana Investment Advisers Pty Ltd NLE	6,213	6,213	6,213	0	0	0	0	0	0	0	0
Jane Street Capital, L L C	231,119	73,433	118,290	393,437	460,545	1,039,403	700,199	492,749	319,275	217,799	1,014,601
Janney Montgomery Scott LLC	0	0	11,587	0	0	0	11,745	11,410	0	0	0
Janus Henderson Investors	36,790	70,672	59,322	33,688	31,506	320,876	316,759	318,981	662,419	668,300	1,957,634
Jefferies Financial Group Inc	517,000	0	0	0	0	0	0	0	0	0	0
Jefferies LLC	57,417	0	0	0	91,658	98,965	222,593	12,000	0	0	0
Joel Isaacson & Co., LLC	740	0	0	0	0	0	0	0	0	0	0
Johnson Financial Group, LLC	0	0	30,893	11,070	0	0	0	0	0	0	0
JP Morgan Asset Management	2,363,355	76,087	123,362	226,868	15,175	1,809,012	848,199	1,120,806	1,428,140	1,519,765	1,757,179
JPMorgan Asset Management (Asia Pacific) Limited	7,592	477	0	0	0	0	0	0	0	0	0
JPMorgan Asset Management (Japan) Limited	0	0	0	0	0	16,129	0	0	0	0	0
JPMorgan Asset Management U K Limited	411,680	1,279,427	165,918	23,872	13,927	235,304	13,927	13,927	13,927	13,927	13,927
JPMorgan Private Bank (United States)	328	328	379	521	373,727	765,432	773,756	827,971	862,024	824,258	740,152
JRC Capital Management, Consultancy & Research GmbH	17,000	17,000	18,500	17,200	17,200	18,200	0	20,100	20,100	35,600	32,100
JRS Finanzmandate AG	16,000	25,000	30,500	12,000	0	0	0	0	0	0	0
Jump Trading, LLC	0	10,332	0	0	0	0	0	0	0	0	0
Jupiter Asset Management Ltd	0	0	0	0	0	0	0	12,000	0	0	0
JustInvest, LLC	0	0	0	0	0	0	0	0	0	0	0
Jyske Invest Fund Management A/S	0	20,632	30,948	0	10,320	10,320	10,320	10,320	6,957	6,957	6,957
Kahn Brothers Advisors LLC	0	0	0	0	0	0	0	0	0	0	0
Kairos Partners SGR S p A	0	5,000	0	64,000	54,000	0	0	0	0	0	0
Kanaly Trust Company	124	124	124	124	124	124	124	124	0	0	0
Kathrein Capital Management AG	1,930	1,930	1,930	1,930	1,930	1,930	1,930	1,930	1,930	0	0
Kathrein Privatbank Aktiengesellschaft	0	0	0	0	0	26,347	0	0	0	0	0
Kavar Capital Partners, LLC	0	0	0	0	0	1,600	800	0	0	0	0
Kazanian Asset Management, LLC	0	0	0	0	0	0	0	0	78,908	63,000	63,000
KB Asset Management Co., Ltd	374	374	374	0	0	0	0	0	0	0	0
KBC Asset Management N V	943,620	943,620	1,120,455	1,120,455	1,120,455	1,120,455	1,120,455	1,120,455	1,120,455	1,120,455	0
KBC Fund Management Limited	60,156	60,156	60,156	60,156	0	0	0	0	0	0	0
Keebeck Wealth Management LLC	0	0	0	0	0	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Investitori SGR S p A	0	0	0	0	0	0
IPCconcept (Luxemburg) S A	0	0	0	0	0	0
IPG Investment Advisors, LLC	0	68,000	97,000	0	0	0
IQAM Invest GmbH	2,241	2,241	0	0	0	0
IRC Wealth	19,013	19,013	18,631	18,181	18,181	17,431
Irish Life Investment Managers Ltd	152,353	142,390	142,390	148,670	138,154	127,375
IST Investmentsstiftung	2,682	2,714	2,692	2,820	3,055	53,752
J O Hambro Capital Management Limited	0	0	0	0	0	0
J P Morgan Private Investments Inc (JPMPi)	0	0	0	0	0	0
J P Morgan Securities LLC	124,982	617,986	608,575	465,661	651,753	668,775
J P Morgan Securities plc	7,260,850	1,027,402	0	3,465,579	2,186,538	0
Jackson National Asset Management, LLC	0	0	0	0	0	0
Jackson Square Partners, LLC	0	0	0	0	0	0
Jacobi Capital Management, LLC	325	0	0	0	0	0
James Investment Research Inc	0	0	0	0	0	0
Jana Investment Advisers Pty Ltd NLE	0	0	0	0	0	0
Jane Street Capital, L L C	211,365	685,734	2,433,599	677,271	277,293	330,456
Janney Montgomery Scott LLC	0	0	0	0	0	0
Janus Henderson Investors	1,483,397	1,175,930	631,413	618,291	657,918	1,200,787
Jefferies Financial Group Inc	0	0	0	0	0	0
Jefferies LLC	141,292	0	881	0	0	0
Joel Isaacson & Co., LLC	0	0	0	0	0	0
Johnson Financial Group, LLC	0	0	0	0	0	0
JP Morgan Asset Management	1,736,552	1,819,966	1,562,227	1,619,685	1,640,637	1,232,319
JPMorgan Asset Management (Asia Pacific) Limited	0	0	0	0	0	0
JPMorgan Asset Management (Japan) Limited	0	0	0	0	0	0
JPMorgan Asset Management U K Limited	13,927	13,927	18,629	12,336	8,818	9,836
JPMorgan Private Bank (United States)	881,305	964,660	991,100	845,729	890,935	1,038,999
JRC Capital Management, Consultancy & Research GmbH	32,100	32,100	32,100	32,100	32,100	32,100
JRS Finanzmandate AG	0	0	0	0	0	0
Jump Trading, LLC	0	0	0	0	0	0
Jupiter Asset Management Ltd	0	0	0	66,241	1,930,395	24,208
JustInvest, LLC	0	0	0	32,782	34,522	35,500
Jyske Invest Fund Management A/S	9,001	9,001	6,866	6,866	6,866	6,866
Kahn Brothers Advisors LLC	0	0	0	0	10,000	10,000
Kairos Partners SGR S p A	0	0	0	0	0	0
Kanally Trust Company	0	0	0	0	0	0
Kathrein Capital Management AG	0	0	0	0	0	0
Kathrein Privatbank Aktiengesellschaft	0	0	0	38,222	0	0
Kavar Capital Partners, LLC	0	0	0	0	0	0
Kazanian Asset Management, LLC	63,000	63,000	63,000	63,000	63,000	63,000
KB Asset Management Co., Ltd	0	0	0	312	312	312
KBC Asset Management N V	0	0	0	0	0	0
KBC Fund Management Limited	0	0	0	0	0	0
Keebeck Wealth Management LLC	0	0	0	5,000	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Kepler Asset Management, Inc	18,115	10,550	10,550	12,752	32,052	32,052	29,976	10,550	0	0	0
Kestrel Partners LLP	0	0	0	0	0	0	0	0	0	0	0
Kinea Investimentos Ltda	0	0	0	6,166	6,166	44,819	19,249	17,536	96,924	257,064	668,915
KIRIX Vermögensverwaltung AG	0	0	0	0	25,000	25,000	25,000	25,000	0	0	0
KLP Fondsförvaltning AS	0	0	0	0	0	0	0	0	291,410	291,410	291,410
KLP Forsikring	0	0	0	0	0	0	0	0	0	0	0
Kore Private Wealth, LLC	0	0	0	0	0	0	0	0	1,000	1,000	0
Kraus Partner Investment Solutions AG	0	0	0	30,900	38,500	0	0	0	0	0	0
KREMSER BANK und Sparkassen AG	0	0	0	0	0	0	50,000	50,000	50,000	50,000	50,000
Kutxabank Gesion, SGHC, S A U	162,872	162,872	265,340	269,510	259,782	337,011	337,011	401,194	401,194	0	0
KUYLENSTIERNA & SKOG S A	0	0	0	0	35,000	35,000	35,000	35,000	35,000	0	0
Kyobo AXA Investment Managers Co., Ltd	0	0	0	0	0	0	0	0	0	0	0
La Banque Postale Asset Management	1,070,600	2,109,980	2,533,380	2,637,596	1,993,643	1,387,575	1,040,313	321,250	263,509	882,725	807,766
La Banque Postale Structured Asset Management	0	0	0	0	0	0	0	0	0	0	0
La Française AM	128,710	128,710	128,710	128,710	21,262	0	10,222	8,844	17,690	0	0
La Française Systematic Asset Management GmbH	0	0	0	0	0	0	3,953	4,087	3,650	0	0
Ladenburg Thalmann Asset Management Inc (LTAM)	9,697	14,637	13,832	13,679	12,463	8,642	8,642	6,502	4,351	4,586	4,881
LähtiTapiola Varainhoito Oy	0	0	0	0	0	0	0	0	0	0	12,265
Lake Street Advisors	0	0	0	0	0	0	0	0	0	0	0
Lampe Asset Management GmbH	1,500	0	0	0	0	0	0	0	0	0	0
Laurel Wealth Advisors, Inc	0	0	0	0	0	0	0	0	0	12,200	0
Laurion Capital Management LP	0	29,000	43,500	0	0	0	0	0	0	0	0
Lazard Asset Management Limited	18,738	454,160	662,049	683,425	494,724	0	0	0	6,883,896	0	0
Lazard Asset Management, L L C	0	237	0	0	0	380,900	380,900	380,900	13,963	13,963	13,963
LBA Wealth Management, LLC NLE	500	500	500	500	500	0	0	0	0	0	0
LBBW Asset Management Investmentgesellschaft mbH	16,179	117,378	104,816	152,889	167,889	191,138	121,138	114,138	107,539	107,539	97,539
Legacy Financial Advisors, Inc	0	0	0	0	25	25	0	0	0	0	0
Legal & General Investment Management America Inc	15,900	15,900	22,655	23,517	26,568	25,773	25,773	81,719	81,719	81,719	81,719
Legal & General Investment Management Ltd	892,223	892,223	1,350,924	1,273,642	1,298,393	1,333,496	1,302,926	1,290,539	1,310,668	1,407,152	1,462,112
Lemanik Asset Management S A	5,000	5,000	3,000	3,000	7,500	7,500	37,500	7,500	0	0	0
Lemanik Invest SA	0	70,000	0	40,000	0	0	0	0	0	0	0
Lenox Wealth Management, Inc NLE	0	0	0	0	0	0	0	0	0	0	0
Lesi Sroufe & Company, Inc	189,394	202,266	295,962	289,702	277,543	279,568	276,070	276,433	0	0	0
Levin Capital Strategies, L P	0	2,515,251	1,078	0	0	0	0	0	0	0	0
LGA Investissements Associé NLE	2,990	2,990	3,939	3,939	3,939	3,939	3,939	3,939	3,939	0	0
Lido Advisors, LLC	0	0	0	0	0	0	17,000	17,000	17,200	0	0
Lightman Investment Management Limited	0	0	0	0	0	0	0	0	0	0	14,386
Lindbrook Capital, LLC	0	0	0	0	0	0	0	0	5,071	5,117	2,934
Linden Advisors L P	0	0	0	0	0	0	300,000	900,000	1,100,000	1,100,000	1,100,000
Lipe & Dalton Investment Counsel	0	0	133,310	132,330	131,840	0	0	0	0	0	0
Live Your Vision, LLC NLE	0	0	0	0	300	300	0	0	0	0	0
LLB Asset Management AG	31,958	31,958	27,558	19,103	37,558	36,372	37,502	37,502	27,413	15,592	27,413
LLB Invest Kapitalanlagegesellschaft m b H	43,000	5,000	5,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000
LMR Partners LLP	0	23,872	94,970	1,071,839	3,722,717	3,722,717	2,840,376	552,274	25,249	0	0
LoCorr Fund Management, LLC	0	0	0	0	0	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44.6%	45.0%	43.2%	39.4%	38.7%	39.4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Kepler Asset Management, Inc	0	0	0	0	0	0
Kestrel Partners LLP	0	0	6,890	2,797	2,797	2,797
Kinea Investimentos Ltda	344,715	220,488	0	0	0	0
KIRIX Vermögensverwaltung AG	0	0	0	0	0	0
KLP Fondsförvaltning AS	291,410	291,410	291,410	285,749	285,749	285,749
KLP Forsikring	0	0	0	116,589	116,589	93,743
Kore Private Wealth, LLC	0	1,321	1,228	1,000	0	0
Kraus Partner Investment Solutions AG	0	0	0	0	0	0
KREMSER BANK und Sparkassen AG	0	0	0	0	0	0
Kutxabank Gestion, SGHC, S.A.U	0	0	0	0	0	0
KUYLENSTIERNA & SKOG S.A	0	0	0	0	0	0
Kyobo AXA Investment Managers Co., Ltd	1,381	1,381	1,381	1,383	1,381	0
La Banque Postale Asset Management	1,549,605	511,870	669,289	1,123,060	785,612	785,612
La Banque Postale Structured Asset Management	0	0	0	21,328	21,130	21,130
La Française AM	0	0	0	0	0	0
La Française Systematic Asset Management GmbH	0	0	0	0	0	0
Ladenburg Thalmann Asset Management Inc (LTAM)	26,361	4,371	4,371	4,371	4,371	4,371
LähtiTapiola Varainhoito Oy	16,916	16,916	57,162	28,581	28,581	40,899
Lake Street Advisors	10,220	10,691	15,193	12,226	11,510	10,599
Lampe Asset Management GmbH	0	0	0	0	0	0
Laurel Wealth Advisors, Inc	0	0	0	0	0	0
Laurion Capital Management LP	0	0	0	0	0	0
Lazard Asset Management Limited	0	0	0	0	0	0
Lazard Asset Management, L.L.C	13,963	12,999	0	244	70,510	723,572
LBA Wealth Management, LLC NLE	0	0	0	0	0	0
LBBW Asset Management Investmentgesellschaft mbH	97,539	97,539	77,500	77,500	77,500	527,500
Legacy Financial Advisors, Inc	0	0	0	0	0	0
Legal & General Investment Management America Inc	81,719	81,719	106,092	106,092	106,092	82,402
Legal & General Investment Management Ltd	1,440,456	1,555,232	1,460,564	1,468,502	1,454,646	2,016,449
Lemanik Asset Management S.A	0	0	0	0	0	0
Lemanik Invest SA	0	0	0	0	0	0
Lenox Wealth Management, Inc NLE	0	0	387	387	387	387
Lesca Sroufe & Company, Inc	0	0	0	0	0	0
Levin Capital Strategies, L.P	0	0	0	0	0	0
LGA Investissements Associé NLE	0	0	0	0	0	0
Lido Advisors, LLC	0	0	0	0	0	0
Lightman Investment Management Limited	68,306	143,824	300,228	300,228	541,223	561,255
Lindbrook Capital, LLC	6,433	5,510	3,124	4,112	4,096	4,096
Linden Advisors L.P	0	0	0	0	0	0
Lipe & Dalton Investment Counsel	0	0	0	0	0	0
Live Your Vision, LLC NLE	0	0	0	0	0	0
LLB Asset Management AG	25,444	25,001	25,001	32,194	32,194	37,738
LLB Invest Kapitalanlagegesellschaft mbH	50,000	0	0	0	0	0
LMR Partners LLP	0	0	0	0	0	0
LoCorr Fund Management, LLC	0	0	0	0	0	1,215

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Lombard Odier Asset Management (Europe) Ltd	4,610	0	0	0	0	0	0	0	0	0	0
Lord, Abbott & Co LLC	6,700	6,700	3,350	3,350	3,350	3,350	3,350	3,350	3,350	3,350	0
Loring, Wolcott & Coolidge Fiduciary Advisors, LLP	0	0	0	0	0	0	0	0	0	0	645
Los Angeles Capital Management And Equity Research, Inc	0	210,639	0	0	0	0	0	0	0	0	0
LourdMurray	0	0	0	0	0	0	0	0	29,223	0	0
LOYS AG	0	0	0	94,500	94,500	394,500	644,500	644,500	644,500	644,500	794,500
LPL Financial LLC	25,840	24,875	27,117	22,506	15,856	0	0	10,826	0	0	0
LRI Invest S A	5,500	25,500	25,500	25,500	5,500	25,500	27,500	7,500	7,500	7,500	7,500
LS Investment Advisors, LLC	450	450	450	450	450	450	450	450	0	0	0
LSV Asset Management	441,572	443,153	665,701	615,068	613,426	381,950	380,900	396,761	0	14,445	0
Lucus Advisors LLC, NLE	0	23,753	0	0	0	0	0	0	0	0	0
LUKB Expert Fondsleitung AG	162,700	131,500	131,500	174,450	174,450	174,450	174,450	174,450	174,450	174,450	0
Lux Gest Asset Management S A	0	30,000	20,000	0	0	0	0	0	0	0	0
Lyxor Asset Management	1,247,978	11,136,251	12,546,778	12,411,137	11,498,393	15,832,932	5,684,955	7,097,884	4,812,577	10,230,832	7,213,391
Lyxor Funds Solutions S A	10,880,883	1,732,970	10,052,934	7,370,809	7,253,319	5,425,451	5,624,357	4,089,930	2,261,455	2,530,393	2,181,541
Lyxor International Asset Management S A S Deutschland	0	0	0	0	0	0	0	3,322,001	2,029,150	2,580,676	2,234,350
M & G Investment Management Ltd	4,034,217	2,357,579	3,353,417	3,224,693	3,052,443	3,264,063	3,183,200	3,107,071	1,636,473	1,486,893	798,140
Mackenzie Financial Corporation	398	3,131	8,344	11,521	21,419	37,802	45,218	48,070	28,696	22,479	15,855
Macquarie Investment Management	0	210,762	370,652	338,826	338,826	0	0	0	0	0	0
Macquarie Investment Management Austria Kapitalanlage AG	0	0	0	0	0	0	17,661	17,661	17,661	28,900	71,793
Macquarie Investment Management Ltd	0	0	0	0	0	0	0	0	100	0	0
Magnetar Capital Partners LP	0	0	0	0	0	11,384	68,510	0	0	0	0
Maistas Asset Management AG	4,000	3,000	4,500	4,500	4,500	3,800	0	0	0	0	0
MainFirst Asset Management	0	0	120,000	90,000	90,000	90,000	2,144,883	2,284,884	145,648	92,177	0
MainSky Asset Management AG	48,925	48,925	48,925	48,925	48,925	48,925	48,925	48,925	0	0	0
MainStreet Advisors	0	0	0	0	0	0	0	0	0	0	0
Mairs and Power, Inc	0	0	0	0	0	0	0	0	0	0	0
Malakoff Humanis Gestion d'Actifs	0	0	0	300,480	300,480	0	0	0	0	0	0
MANA Advisors LLC	0	0	0	0	0	0	0	0	0	0	0
Managed Account Advisors LLC	139,965	225,925	180,940	283,529	99,585	74,776	79,778	367	367	367	367
Mandarine Gestion	0	0	0	0	0	0	0	0	0	0	0
Mandatum Henkivakuutusosakeyhtiö	10,660	0	0	0	8,400	22,000	22,000	22,000	32,000	32,000	28,000
Manulife Investment Management (North America) Limited	123,976	0	588,187	562,371	440,068	405,500	0	305,239	179,599	1,102,145	1,071,824
Manulife Investment Management (US) LLC	603,619	0	982,933	951,681	740,470	659,884	0	674,116	0	0	0
Mapfre Inversión Dos, S G I I C , S A	266,583	304,273	0	0	0	0	0	0	0	0	0
Marathon Trading Investment Management LLC	80,819	0	0	0	0	0	0	0	0	0	0
March Asset Management, S G I I C , S A U	4,210	4,210	4,210	4,210	4,210	4,210	0	0	0	0	0
Margetts Fund Management Limited	0	0	0	0	0	0	0	0	0	0	0
Marshall Wace LLP	0	0	0	0	0	323,648	0	0	0	0	0
Martin Currie Investment Management Ltd	0	0	0	0	0	0	0	0	0	0	0
Massachusetts Mutual Life Insurance Company	28,991	31,258	45,184	38,144	36,674	36,674	35,206	0	0	0	0
Masters Capital Management, L L C	1,905,830	2,000,000	2,500,000	2,000,000	2,000,000	2,000,000	0	0	0	0	0
Matrix Capital Management Trust reg	0	0	112,000	112,000	0	0	0	0	0	14,000	0
MAV Vermögensverwaltung GmbH	0	0	0	0	0	0	0	0	0	0	0
Maven Securities	0	81,489	0	0	0	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Lombard Odier Asset Management (Europe) Ltd	0	0	0	0	0	0
Lord, Abnett & Co LLC	0	0	0	0	0	0
Loring, Wolcott & Coolidge Fiduciary Advisors, LLP	0	0	0	0	0	0
Los Angeles Capital Management And Equity Research, Inc	0	0	0	0	0	0
LourdMurray	0	0	0	0	0	0
LOYS AG	794,500	794,500	794,500	494,500	494,500	494,500
LPL Financial LLC	0	13,159	13,345	12,929	14,371	13,253
LRI Invest S A	7,500	7,500	19,310	7,500	7,500	7,500
LS Investment Advisors, LLC	0	0	0	0	0	0
LSV Asset Management	0	0	0	0	0	0
Lucus Advisors LLC, NLE	0	0	0	0	0	0
LUKB Expert Fondsleitung AG	0	0	0	0	0	0
Lux Gest Asset Management S A	0	0	0	0	0	0
Lyxor Asset Management	11,067,162	16,415,410	10,089,967	10,407,760	23,338,702	16,979,298
Lyxor Funds Solutions S A	2,275,947	1,971,787	2,287,235	2,375,765	125,106	148,558
Lyxor International Asset Management S A S Deutschland	2,338,861	2,043,642	2,363,598	4,850,727	2,839,371	5,406,875
M & G Investment Management Ltd	802,916	797,358	761,262	671,807	650,016	648,248
Mackenzie Financial Corporation	0	47,716	48,446	59,027	61,771	64,841
Macquarie Investment Management	0	0	0	0	0	0
Macquarie Investment Management Austria Kapitalanlage AG	35,830	6,930	6,930	6,930	6,930	6,930
Macquarie Investment Management Ltd	0	0	0	0	0	2,875,005
Magnetar Capital Partners LP	0	0	0	0	0	0
Maiestas Asset Management AG	0	0	0	0	0	0
MainFirst Asset Management	22,718	86,757	0	0	3,454	0
MainSky Asset Management AG	0	0	0	0	0	0
MainStreet Advisors	0	0	0	609	609	609
Mairs and Power, Inc	0	0	13,818	17,658	17,809	17,642
Malakoff Humanis Gestion d'Actifs	0	0	0	0	0	0
MANA Advisors LLC	15,532	0	0	0	0	0
Managed Account Advisors LLC	367	367	34,519	39,426	53,854	101,894
Mandarine Gestion	0	0	0	0	57,427	54,102
Mandatum Henkivakuutusosakeyhtiö	28,000	28,000	29,090	28,000	28,000	28,000
Manulife Investment Management (North America) Limited	957,112	1,109,229	1,033,082	1,201,479	1,075,763	926,758
Manulife Investment Management (US) LLC	765,079	917,824	3,590,590	2,557,944	2,039,473	0
Mapfre Inversión Dos, S G I I C , S A	0	0	0	0	0	0
Marathon Trading Investment Management LLC	0	0	0	0	0	0
March Asset Management, S G I I C , S A U	0	0	0	0	0	0
Margetts Fund Management Limited	0	0	0	0	0	16,476
Marshall Wace LLP	175,114	0	2,019,915	2,797,224	999,164	1,914,708
Martin Currie Investment Management Ltd	0	0	247,790	247,790	247,790	247,790
Massachusetts Mutual Life Insurance Company	0	0	0	0	0	0
Masters Capital Management, L L C	0	0	2,000,000	0	0	0
Matrix Capital Management Trust reg	0	0	0	0	0	0
MAV Vermögensverwaltung GmbH	0	0	0	15,292	15,292	15,292
Maven Securities	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41.0%	51.7%	46.2%	46.6%	49.6%	45.8%	44.0%	50.7%	49.0%	43.4%	45.3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Mayr Investment Managers GmbH	0	0	0	0	0	0	0	0	0	45,554	45,554
MB Fund Advisory GmbH	426,000	426,000	476,000	510,000	510,000	550,000	560,000	610,000	610,000	610,000	670,000
McAdam, LLC	0	0	0	0	0	136	136	136	0	0	0
McGinn Investment Management, Inc	0	0	0	0	0	0	0	0	52,000	52,000	52,000
McKinley Capital Management, LLC	83,715	0	0	0	0	0	0	0	0	0	0
MD Financial Management Inc	0	0	0	0	0	0	14,066	14,066	14,611	14,611	14,611
MEAG MUNICH ERGO AssetManagement GmbH	31,010	15,725	17,012	21,874	21,874	21,874	9,000	21,546	9,000	9,000	9,000
MEAG Munich ERGO Kapitalanlagegesellschaft mbH	5,641,684	562,880	719,064	707,397	727,739	707,484	709,651	416,465	343,214	228,214	223,604
Mediobanca SGR S.p.A.	53,152	63,252	69,450	72,663	75,823	22,964	39,322	22,106	29,500	29,500	2,299
Mediolanum Asset Management Limited	265,327	265,327	285,641	285,641	522,521	185,033	167,548	137,583	136,955	0	0
Meitav Dash Investments Ltd	0	0	0	0	0	0	0	0	12,500	12,706	12,500
Mellon Investments Corporation	6,225,648	6,317,630	8,618,013	8,717,629	8,565,489	3,252,872	2,978,057	2,861,466	2,841,923	2,761,119	3,009,207
Mercados y Gestión de Valores A.V. S.A.	9,574	9,574	9,574	9,574	9,574	9,574	0	0	0	0	0
Mercer Global Advisors, Inc	0	0	0	0	0	0	0	0	0	0	0
Mercer Global Investments Management Ltd	0	0	0	0	0	0	0	0	0	0	0
Mercer Investments LLC	0	0	0	0	0	0	0	0	0	0	0
Mercier Vanderlinden Asset Management NV	0	0	0	0	1,365,000	1,930,000	1,930,000	1,930,000	0	0	0
Merck Finck, a Quintet Private Bank (Europe) S.A. branch	36,833	0	0	0	0	0	0	0	0	0	0
Merian Global Investors (UK) Limited NLE	0	0	0	0	0	0	0	0	0	0	0
Merriam Investment Managers	0	0	0	0	0	0	0	0	0	0	0
Meru Capital Group, LP	0	60,000	0	0	0	0	0	0	0	0	0
Messieurs Hottinguer & Cie Gestion Privée S.A.	2,000	4,000	7,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
Metropolitan Life Insurance Co (US)	1,838	1,838	1,838	1,838	1,838	1,838	1,838	146,810	146,810	146,810	146,810
Metzler Asset Management GmbH	11,000	11,000	11,000	11,000	11,000	11,000	11,000	69,728	70,892	70,805	71,108
MFC Asset Management PCL	3,000	3,000	0	0	0	0	0	0	0	0	0
MFI Asset Management GmbH	13,624	13,624	17,837	40,708	17,224	12,349	13,296	16,241	0	0	0
MFS Investment Management	39,255	39,255	52,253	52,253	52,253	99,819	99,819	99,819	99,819	85,345	85,345
Michael Pintarelli Finanzdienstleistungen AG	121,700	121,700	97,750	97,750	108,250	108,250	114,800	114,800	218,550	218,550	218,550
Migros Bank Asset Management	5,398	5,398	40,376	40,376	40,376	40,376	40,376	40,376	50,346	50,346	48,186
Millennium Management LLC	0	0	137,371	334,525	0	117,989	0	0	0	0	0
Miller Value Partners, LLC	0	0	53,180	47,595	45,500	47,850	55,860	19,990	0	0	0
Milliman Financial Risk Management, LLC	0	0	0	0	32,176	30,633	30,359	28,177	15,481	28,973	24,861
MinichMacGregor Wealth Management, LLC	0	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	0	0
Mirae Asset Global Investments (USA) LLC	32,186	26,180	41,442	48,081	64,786	73,723	43,737	61,920	63,120	0	0
Mirae Asset Global Investments Co., Ltd	4,094	8,394	6,156	6,156	6,461	6,461	6,461	6,461	6,461	6,461	6,461
Mitsubishi UFJ Kokusai Asset Management Co., Ltd	117,510	135,002	141,872	141,872	141,872	141,872	143,223	143,223	143,223	143,223	7,552
Mitsubishi UFJ Trust and Banking Corporation	0	0	0	0	0	0	0	0	0	0	0
MK LUXINVEST S.A.	1,214	1,214	2,337	2,337	2,337	2,337	2,337	2,337	5,737	5,737	3,400
MLC Asset Management	24,587	25,135	25,135	37,369	0	0	0	0	0	0	0
MLC Investments Limited	57,421	58,325	129,974	122,624	64,123	64,307	68,048	24,339	24,219	24,726	25,172
Monaco asset management S.A.M.	0	0	0	0	0	0	0	0	0	0	0
Monega Kapitalanlagegesellschaft mbH	264,143	264,143	264,143	264,143	384,875	102,863	97,833	71,465	48,894	42,161	47,759
Montepio Gestão de Activos - SGFI, S.A.	22,240	23,000	32,000	32,000	32,000	32,000	32,000	32,000	28,100	28,100	28,100
Moody National Bank	0	0	0	0	0	0	0	0	612	0	0
Moore Capital Management, LP	600,000	0	0	0	0	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44.6%	45.0%	43.2%	39.4%	38.7%	39.4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Mayr Investment Managers GmbH	45,554	0	0	0	0	0
MB Fund Advisory GmbH	706,000	713,000	697,000	487,000	487,000	487,000
McAdam, LLC	0	0	0	0	0	0
McGinn Investment Management, Inc	52,000	52,000	52,000	52,000	52,000	94,170
McKinley Capital Management, LLC	0	0	0	0	0	0
MD Financial Management Inc	14,611	85,304	85,304	89,217	89,217	95,776
MEAG MUNICH ERGO AssetManagement GmbH	9,000	9,000	9,000	9,000	9,000	9,000
MEAG Munich ERGO Kapitalanlagegesellschaft mbH	325,604	225,727	228,772	214,556	205,568	109,881
Mediobanca SGR S.p.A.	958	958	958	958	958	958
Mediolanum Asset Management Limited	0	0	84,000	84,000	84,000	0
Meitav Dash Investments Ltd	24,706	24,642	0	0	0	0
Mellon Investments Corporation	3,019,487	1,950,386	1,886,292	1,956,045	1,929,801	1,859,799
Mercados y Gestión de Valores A.V., S.A.	0	0	0	0	0	0
Mercer Global Advisors, Inc	0	0	0	45,659	50,787	53,636
Mercer Global Investments Management Ltd	0	0	0	118,606	118,606	176,624
Mercer Investments LLC	0	0	0	0	0	353,381
Mercier Vanderlinden Asset Management NV	0	0	0	0	0	0
Merck Finck, a Quintet Private Bank (Europe) S.A. branch	0	0	238,077	150,113	0	0
Merian Global Investors (UK) Limited NLE	0	0	0	2,696,014	0	0
Merriam Investment Managers	0	0	26,881	16,003	0	0
Meru Capital Group, LP	0	0	0	0	0	0
Messieurs Hottinguer & Cie Gestion Privée S.A.	9,000	9,000	9,000	9,000	9,000	9,000
Metropolitan Life Insurance Co (US)	146,810	127,734	137,605	137,605	148,867	135,204
Metzler Asset Management GmbH	68,276	59,397	77,023	77,294	77,294	72,149
MFC Asset Management PCL	0	0	0	0	0	0
MFI Asset Management GmbH	0	0	0	0	0	30,000
MFS Investment Management	85,345	85,345	85,345	85,345	85,345	85,345
Michael Pintarelli Finanzdienstleistungen AG	218,550	136,550	136,550	64,500	64,500	14,500
Migros Bank Asset Management	48,186	25,807	25,807	25,807	25,807	51,286
Millennium Management LLC	0	0	0	0	0	0
Miller Value Partners, LLC	0	0	0	0	0	0
Milliman Financial Risk Management, LLC	24,920	24,275	2,857	7,836	15,609	20,673
MinichMacGregor Wealth Management, LLC	0	0	0	0	0	0
Mirae Asset Global Investments (USA) LLC	0	29,532	35,903	39,291	45,933	51,995
Mirae Asset Global Investments Co., Ltd	6,461	0	0	0	0	0
Mitsubishi UFJ Kokusai Asset Management Co., Ltd	7,552	7,552	7,552	8,371	8,371	8,371
Mitsubishi UFJ Trust and Banking Corporation	5,756	5,126	4,263	15,800	15,234	11,622
MK LUXINVEST S.A.	3,400	3,400	3,400	3,400	3,400	3,400
MLC Asset Management	0	0	0	673	3,520	3,950
MLC Investments Limited	25,172	24,783	24,365	24,505	24,749	24,108
Monaco asset management S.A.M.	0	100,000	0	0	0	0
Monega Kapitalanlagegesellschaft mbH	54,178	57,490	63,908	63,908	63,908	63,908
Montepio Gestão de Activos - SGFI, S.A.	28,100	31,000	31,000	31,000	31,000	36,687
Moody National Bank	0	0	0	0	0	0
Moore Capital Management, LP	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Morgan Stanley & Co International Plc	0	0	0	0	0	0	0	94,027	32,500	7,500	4,100
Morgan Stanley & Co LLC	473,983	3,034	48,479	338,799	41,682	53,938	21,054	243	13,398	468,712	2,456,453
Morgan Stanley Investment Management Inc (US)	100,838	32,800	32,800	32,800	32,800	18,785	9,344	9,344	9,344	9,344	9,344
Morgan Stanley Investment Management Ltd (UK)	16,361	16,361	0	0	0	0	0	859	4,691	4,837	1,005
Morgan Stanley Smith Barney LLC	753,241	955,068	1,242,040	1,325,715	1,183,356	1,057,822	611,919	1,184,335	1,159,912	941,787	1,095,184
MSA Financial	0	0	0	0	0	193	193	193	193	193	0
MUFG Securities EMEA plc	0	0	0	0	0	0	0	0	0	0	0
National Asset Management, Inc	10,330	0	0	0	0	0	0	0	0	0	0
National Bank Trust	0	0	0	0	0	0	0	0	0	0	0
National-Bank AG	0	0	0	0	0	0	0	0	0	0	0
Nationale-Nederlanden Powszechnie Towarzystwo Emerytalne S A	69,090	69,090	0	0	0	0	0	0	1,560,000	1,560,000	1,560,000
Natixis Investment Managers	0	0	0	0	0	0	0	0	0	0	0
NBG Asset Management Mutual Funds Management Company S A	55,000	25,000	67,538	55,838	55,838	53,000	55,500	28,000	0	0	0
NBT Bank N A	0	0	0	0	0	0	0	0	0	0	0
Nelson, Van Denburg & Campbell Wealth Management Group, LLC	150	0	0	0	0	0	0	0	0	0	0
Neuberger Berman, LLC	0	0	0	0	0	17,732	17,732	18,398	30,717	0	0
Neuburg Advisors LLC	11,492	11,492	11,492	11,492	11,492	11,492	11,492	13,430	19,142	19,142	22,848
NEXT Financial Group, Inc	150	0	0	0	0	0	0	0	0	0	0
Nextam Partners SGR S p A	4,456	3,477	3,477	3,477	3,477	3,477	3,477	3,477	3,477	0	0
NF Trinity Capital (Hong Kong) Limited NLE	0	0	0	0	0	533,225	533,225	533,225	533,225	533,225	533,225
NFJ Investment Group, LLC	0	5,678	8,517	0	0	0	0	0	0	0	0
NFS Capital AG	13,000	0	20,000	20,000	20,000	20,000	20,000	0	0	0	0
Niche Asset Management Limited	0	0	0	0	0	0	0	0	0	0	2,500
Nicholas Hoffman & Company, LLC	0	0	0	0	0	0	0	0	0	10,000	10,000
Nicholas Investment Partners, L P	0	0	0	0	750,000	0	0	0	0	0	0
Nikko Asset Management Americas, Inc	0	25,799	25,799	25,799	25,799	34,499	34,499	34,499	34,499	40,799	40,799
Nikko Asset Management Co., Ltd	48,739	57,729	57,729	57,729	57,729	57,729	57,729	1,948	50,151	54,521	52,925
Nippon Life Global Investors Singapore Limited	15,184	15,184	15,184	15,184	36,233	36,233	36,233	36,233	57,691	57,691	57,691
NN Investment Partners (Singapore) Ltd	4,615	0	0	0	0	0	0	0	0	0	0
NN Investment Partners C R , a s	0	0	0	0	0	0	903	903	903	903	903
NNIP Advisors B V	2,157,482	1,468,758	1,334,148	1,662,658	1,396,938	803,685	981,232	893,182	0	0	0
NNIP Asset Management B V	320,895	44,267	44,267	59,959	71,408	135,404	121,780	61,366	61,366	64,654	64,654
Nomura Asset Management (UK) Ltd	0	0	0	0	0	0	0	0	0	0	0
Nomura Asset Management Co., Ltd	17,606	16,138	16,138	16,138	16,138	18,548	0	0	313,901	313,939	165,200
Nomura Asset Management Singapore Ltd	0	160	160	160	160	477	477	477	477	642	642
Nomura Asset Management Taiwan Limited	0	0	27,731	27,731	27,731	27,731	0	0	0	0	0
Nomura Securities Co., Ltd	17,606	0	0	20,637	48,422	43,982	442,403	744,274	2,089,061	907,020	1,923,271
Nordea Funds Oy	60,846	7,563	12,950	15,784	15,784	16,411	16,411	14,830	17,884	17,884	18,250
Nordea Investment Funds S A	95,130	41,847	41,847	41,847	41,847	41,847	41,847	41,847	41,847	0	0
Nordea Investment Management AB (Denmark)	80,109	80,109	120,163	1,132,339	2,180,016	2,180,016	1,401,037	104,022	129,962	115,931	115,931
Norges Bank Investment Management (NBIM)	31,340,557	25,017,898	34,039,187	29,666,321	25,493,223	29,323,275	26,402,743	26,557,217	20,312,288	22,069,070	22,069,070
North Star Investment Management Corporation	650	650	975	975	975	975	975	975	975	975	0
Northern Trust Fund Managers (Ireland) Limited	0	0	0	0	0	0	0	0	0	0	0
Northern Trust Global Investments	480,116	425,858	577,869	582,928	744,570	637,738	479,188	697,481	511,306	780,652	591,990
Northern Trust Global Investments Limited	507,726	559,841	941,622	958,197	850,985	871,896	854,915	1,095,171	1,248,657	1,276,485	1,271,712

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Morgan Stanley & Co International Plc	0	0	0	18,144	0	0
Morgan Stanley & Co LLC	342,981	208,359	0	340,965	7,052	283,692
Morgan Stanley Investment Management Inc (US)	423	0	0	0	46,745	46,745
Morgan Stanley Investment Management Ltd (UK)	0	0	0	6,783	5,376	0
Morgan Stanley Smith Barney LLC	1,365,796	1,125,026	831,420	707,386	668,076	644,234
MSA Financial	0	0	0	0	0	0
MUFG Securities EMEA plc	0	0	0	1,500,000	0	0
National Asset Management, Inc	0	0	0	0	0	0
National Bank Trust	0	5,407	5,407	4,476	4,476	4,344
National-Bank AG	0	0	0	27,014	27,014	51,205
Nationale-Nederlanden Powszechnie Towarzystwo Emerytalne S A	1,560,000	1,560,000	1,560,000	1,560,000	1,560,000	0
Natixis Investment Managers	0	0	0	0	8,597	3,886
NBG Asset Management Mutual Funds Management Company S A	0	0	0	0	0	0
NBT Bank N A	0	0	10,000	10,000	10,000	10,000
Nelson, Van Denburg & Campbell Wealth Management Group, LLC	0	0	0	0	0	0
Neuberger Berman, LLC	0	0	0	0	0	0
Neuburgh Advisers LLC	22,848	22,848	22,848	22,848	22,848	22,848
NEXT Financial Group, Inc	0	0	0	0	0	0
Nextam Partners SGR S p A	0	0	0	0	0	0
NF Trinity Capital (Hong Kong) Limited NLE	533,225	533,225	533,225	0	0	0
NFJ Investment Group, LLC	0	0	0	0	0	0
NFS Capital AG	0	0	0	0	0	0
Niche Asset Management Limited	2,500	48,500	48,500	2,500	2,500	2,500
Nicholas Hoffman & Company, LLC	10,000	10,000	10,000	0	0	0
Nicholas Investment Partners, L P	0	0	0	0	0	0
Nikko Asset Management Americas, Inc	40,799	40,799	0	0	0	0
Nikko Asset Management Co , Ltd	54,864	54,767	54,408	8,826	8,341	135,169
Nippon Life Global Investors Singapore Limited	57,691	76,262	76,262	76,262	76,262	104,328
NN Investment Partners (Singapore) Ltd	0	0	0	0	0	0
NN Investment Partners C R , a s	903	903	0	0	0	0
NNIP Advisors B V	0	0	0	0	0	0
NNIP Asset Management B V	64,654	64,654	64,654	64,654	0	0
Nomura Asset Management (UK) Ltd	0	0	0	7	7	7
Nomura Asset Management Co , Ltd	176,557	181,189	198,481	201,683	203,284	204,236
Nomura Asset Management Singapore Ltd	642	642	754	754	754	754
Nomura Asset Management Taiwan Limited	0	0	0	0	0	0
Nomura Securities Co , Ltd	0	0	0	0	0	0
Nordea Funds Oy	18,250	18,250	24,618	31,588	17,377	17,377
Nordea Investment Funds S A	0	0	0	0	0	0
Nordea Investment Management AB (Denmark)	121,088	152,281	155,228	144,286	128,612	119,927
Norges Bank Investment Management (NBIM)	9,328,044	9,796,290	6,202,391	2,142,835	9,763,914	5,234,047
North Star Investment Management Corporation	975	975	0	0	0	0
Northern Trust Fund Managers (Ireland) Limited	0	7,276	8,933	8,933	8,933	8,933
Northern Trust Global Investments	815,553	600,598	773,451	802,321	781,850	760,239
Northern Trust Global Investments Limited	1,266,296	1,278,625	1,210,498	1,540,547	1,589,560	1,600,188

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41.0%	51.7%	46.2%	46.6%	49.6%	45.8%	44.0%	50.7%	49.0%	43.4%	45.3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Northern Trust Investments, Inc	795,402	831,173	1,111,598	1,051,356	1,102,506	1,018,119	919,178	1,189,850	1,096,443	1,251,546	1,224,846
Northern Trust Luxembourg Management Company S A	344,814	344,814	344,814	344,814	344,814	344,814	344,814	0	364,466	767	332
Northern Trust Value Investors	61,398	61,398	61,398	61,398	61,398	61,398	61,398	0	0	0	0
Northwestern Mutual Capital, LLC	7,238	7,409	15,108	15,832	15,698	23,587	28,311	26,909	17,534	17,734	16,055
Novo Banco Gestao, SGIC, S A	3,500	3,500	3,500	3,500	3,500	3,500	3,500	0	0	0	0
NS Partners Ltd	0	0	0	0	0	0	0	0	0	0	0
Nuveen LLC	1,041,522	1,149,307	1,393,188	0	0	0	0	0	0	1,992,139	2,097,551
Nykredit Bank AS	31,645	31,645	42,313	50,617	50,617	27,212	11,187	11,187	53,658	166,858	182,630
Nymbus Capital	3,200	1,900	0	0	4,100	0	0	3,100	0	0	0
Oddo BHF Asset Management GmbH	202,356	202,356	0	0	0	0	11,400	3,411,400	3,411,400	3,411,400	3,411,400
Oddo BHF Asset Management S A S	14,625	18,465	16,675	18,542	19,310	19,310	19,310	19,310	19,576	19,576	0
Odey Asset Management LLP	0	0	0	0	0	0	0	0	0	0	0
Old Mission Capital LLC	0	0	0	0	0	0	20,998	0	0	10,898	67,295
Old Mutual Customised Solutions (Pty) Ltd	0	0	0	0	0	0	0	0	0	0	0
Old Mutual Investment Group (South Africa) (Pty) Limited	0	0	0	0	0	0	0	0	0	0	0
Old National Wealth Management	0	15,066	20,152	20,152	0	0	0	0	0	0	0
Oldfield Partners LLP	0	0	0	0	0	0	0	0	151,675	151,675	151,675
Ontario Teachers' Pension Plan Board	854,519	757,681	474,319	87,479	129,733	0	0	0	0	0	0
OP Varainhoito Oy	44,391	44,391	44,391	44,391	0	0	0	0	0	0	0
OPERA Towarzystwo Funduszy Inwestycyjnych S A	3,000	3,000	4,000	4,000	4,500	4,500	4,500	4,500	4,500	4,500	4,500
Oppenheimer Asset Management Inc	0	12,984	12,984	34,608	34,484	0	103,530	94,080	12,600	71,650	64,675
Optimize Investment Partners	0	0	0	0	0	0	0	37,800	37,800	37,800	0
Oracle Investment Management, Inc	0	0	0	0	0	0	0	0	0	0	0
O'Shaughnessy Asset Management, LLC	0	0	0	0	0	0	0	0	0	0	0
Osmosis Investment Management LLP	0	0	0	0	0	0	0	0	10,845	10,845	10,845
Ossiam	2,845,393	1,080,685	1,345,595	714,858	2,080,312	630,754	3,896,308	3,575,939	3,253,492	733,498	0
Ostrum Asset Management	667,483	11,924	0	0	11,751	0	0	0	724,215	29,696	0
Pacer Advisors, Inc	8,563	8,134	17,789	22,278	33,998	0	66,310	68,809	0	79,909	68,648
Pactio Gestio, S G I I C S A	166,000	166,000	166,000	166,000	166,000	166,000	166,000	0	0	0	0
Paloma Partners Management Company	0	0	0	0	0	0	0	0	0	40,772	0
PanAgora Asset Management Inc	2,043	2,043	2,043	2,043	2,043	2,043	2,043	2,043	2,043	2,043	13,338
Parallax Volatility Advisers, L P	56,953	27,681	0	1,119	0	148,640	0	0	203,364	24,824	49,107
Parallel Advisors, LLC	0	0	0	220	423	148	621	1,906	1,983	2,513	1,630
Parametric Portfolio Associates LLC	721,859	859,096	950,688	1,048,013	1,249,785	1,089,810	799,818	1,470,353	1,678,329	2,477,373	1,776,384
PARTNERS VermogensManagement AG	14,060	14,060	27,090	27,090	27,090	27,090	27,090	27,090	27,090	27,090	27,090
Partnersvest Advisory Services LLC NLE	0	0	0	0	0	0	0	18,500	21,500	41,500	60,500
Pathstone	0	0	0	0	0	0	0	0	0	1,433	1,433
Peak 6 Capital Management, LLC	262,963	1,998	1,031	55,114	60,397	283,684	365,499	236,986	1,100,428	1,203,957	1,319,631
PEH Wertpapier AG	0	0	0	0	0	0	14,800	14,800	14,800	14,800	0
Pekao PTE S A NLE	124,377	124,377	124,377	124,377	0	0	0	0	0	0	0
Penserra Capital Management LLC	0	0	0	0	0	0	0	3,408	4,144	3,696	0
Peregrine Asset Advisers, Inc	159,786	0	0	0	0	0	0	0	0	0	0
Performa Limited (US), LLC	0	0	0	0	0	0	0	0	8,000	0	0
Perigon Wealth Management, LLC	1,022	0	0	0	0	0	0	0	0	0	0
Perkins Investment Management LLC	0	0	0	0	0	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44.6%	45.0%	43.2%	39.4%	38.7%	39.4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Northern Trust Investments, Inc	1,227,378	1,235,393	974,766	1,045,495	1,038,427	1,015,640
Northern Trust Luxembourg Management Company S A	328	325	343	242	285	129
Northern Trust Value Investors	0	0	0	0	0	0
Northwestern Mutual Capital, LLC	14,805	8,790	18,467	8,990	7,470	10,158
Novo Banco Gestao, SGHC, S A	0	0	0	0	0	0
NS Partners Ltd	0	0	0	59,883	59,883	59,883
Nuveen LLC	1,953,230	1,892,461	2,111,273	2,553,037	2,432,312	2,150,299
Nykredit Bank AS	170,318	155,832	308,630	323,366	348,262	600,581
Nymbus Capital	0	0	4,800	4,800	0	4,400
Oddo BHF Asset Management GmbH	3,411,400	3,411,400	3,411,400	0	30,431	32,357
Oddo BHF Asset Management S A S	78,037	89,050	95,521	85,897	84,397	109,150
Odey Asset Management LLP	0	1,346,081	2,845,784	3,604,848	3,066,689	3,516,846
Old Mission Capital LLC	0	0	0	0	11,719	0
Old Mutual Customised Solutions (Pty) Ltd	0	0	0	0	5,143	0
Old Mutual Investment Group (South Africa) (Pty) Limited	381,180	381,180	381,180	586,217	408,585	408,585
Old National Wealth Management	0	0	0	0	0	0
Oldfield Partners LLP	151,675	151,675	151,675	194,269	194,269	194,269
Ontario Teachers' Pension Plan Board	0	106,232	114,613	0	0	0
OP Varainhoito Oy	185,786	229,876	223,796	230,647	243,311	158,510
OPERA Towarzystwo Funduszy Inwestycyjnych S A	4,500	4,500	4,500	4,500	4,500	4,500
Oppenheimer Asset Management Inc	69,725	40,495	56,025	60,475	65,975	38,498
Optimize Investment Partners	0	0	0	0	0	0
Oracle Investment Management, Inc	0	25,000	0	0	0	0
O'Shaughnessy Asset Management, LLC	0	0	155	984	1,334	1,709
Osmosis Investment Management LLP	10,845	10,845	10,845	22,867	22,867	22,867
Ossiam	1,422,076	1,390,827	2,571,058	6,947,103	2,320,606	1,907,930
Ostrum Asset Management	34,244	37,059	130,461	124,365	117,028	122,667
Pacer Advisors, Inc	55,949	52,974	0	0	0	22,152
Pactio Gestao, S G I I C , S A	0	0	0	0	0	0
Paloma Partners Management Company	0	33,122	0	119,187	38,797	64,082
PanAgora Asset Management Inc	13,338	13,338	3,101	3,101	0	0
Parallax Volatility Advisers, L P	224,120	22,845	108,383	64,988	84,922	202,097
Parallel Advisors, LLC	5,024	4,778	1,920	2,999	3,078	2,738
Parametric Portfolio Associates LLC	2,602,948	2,305,338	2,170,896	1,883,556	1,706,380	1,913,374
PARTNERS VermogensManagement AG	27,090	27,090	27,090	27,090	27,090	27,090
Partnervest Advisory Services LLC NLE	139,500	124,500	130,500	24,000	0	0
Pathstone	1,433	0	1,433	1,433	1,433	1,433
Peak 6 Capital Management, LLC	1,362,306	671,138	0	0	64,560	0
PEH Wertpapier AG	0	0	0	0	0	0
Pekao PTE S A NLE	0	0	0	0	0	0
Penserra Capital Management LLC	0	0	0	0	0	0
Peregrine Asset Advisers, Inc	0	0	0	0	0	0
Performa Limited (US), LLC	0	0	0	0	0	0
Perigon Wealth Management, LLC	0	0	0	0	0	0
Perkins Investment Management LLC	0	3,645	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41.0%	51.7%	46.2%	46.6%	49.6%	45.8%	44.0%	50.7%	49.0%	43.4%	45.3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
PGGM Vermogensbeheer B V	1,043,743	1,043,743	1,043,743	1,043,743	1,206,844	1,206,844	1,206,844	1,206,844	1,164,278	1,164,278	1,164,278
PGIM Investments LLC	0	0	0	0	0	0	0	0	0	0	0
PGIM Japan Co., Ltd	0	0	0	0	2,400	2,400	2,400	2,400	2,400	2,400	2,400
PGIM Quantitative Solutions LLC	2,690	2,840	6,782	7,699	7,699	7,973	8,275	8,750	9,437	9,932	12,381
Phoenix Holdings Ltd	0	0	0	0	0	800,000	625,000	0	0	0	0
Picoco, LLC	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	0	0	0
Pictet & Cie (Europe) S A	0	0	0	0	0	0	0	0	16,400	16,400	16,400
Pictet Asset Management Ltd	702,519	849,125	1,222,627	1,191,924	1,139,016	1,125,219	1,072,187	1,452,392	1,010,825	842,648	840,290
Pictet North America Advisors SA	0	0	0	0	31,550	954,805	514,950	500,000	500,000	500,000	500,000
PIMCO (US)	199,979	254,157	300,302	305,208	288,686	273,974	321,000	318,418	325,737	410,734	458,071
PIMCO Europe Ltd	0	0	0	0	0	0	0	0	506	506	506
PineBridge Investments Europe Limited	0	0	0	0	0	0	0	0	0	0	0
PineBridge Investments LLC	0	0	0	0	0	30,680	20,828	28,236	26,987	15,278	0
Pinnacle Holdings, LLC	0	0	0	0	0	0	0	0	0	0	0
Pinnacle Wealth Planning Services, Inc	0	0	0	0	0	0	0	0	0	0	0
Pioneer Investment Management SGRpA, NLE	15,373	115,416	0	0	0	0	0	0	0	0	0
PKB Privat Bank AG	152,500	122,500	183,750	183,750	183,750	183,750	183,750	183,750	183,750	183,750	183,750
PKO BP BANKOWY Powszechnie Towarzystwo Emerytalne S A	34,815	34,815	34,815	34,815	0	0	0	0	0	0	0
Plutos Vermögensverwaltung AG	0	25,000	25,000	0	0	0	0	0	0	0	0
PNC Wealth Management	2,832	8,783	6,344	1,821	7,456	16,301	13,373	11,811	12,461	21,612	22,628
Pocztynion - Arka Powszechnie Towarzystwo Emerytalne S A	86,813	86,813	86,813	86,813	0	0	0	0	86,999	86,999	86,999
Point72 Asset Management, L P	0	0	0	0	0	0	0	0	0	0	0
Polaris Wealth Advisory Group, LLC	51,156	0	0	0	0	0	0	0	0	0	0
Popular Gestión Privada S G I I C., S A	4,000	4,000	4,000	4,000	4,000	4,000	0	0	0	0	0
PORTFOLIO INVEST Vermögensmanagement GmbH	0	0	0	0	0	33,000	33,000	33,000	33,000	33,000	33,000
Portolan Capital Management, L L C	190,944	100,061	0	0	0	0	0	0	0	0	0
PP Capital Asset Management Fondsmæglerselskab A/S	0	0	0	0	0	0	0	0	21,000	0	0
PP-Asset Management GmbH	0	0	0	0	0	0	0	0	0	0	0
Prelude Capital Management, LLC	0	4,880	19,830	9,730	12,780	6,565	0	0	0	0	0
Prima AFP S A	0	0	0	0	0	851,662	0	0	0	0	0
Prime Capital Investment Advisors LLC	0	0	0	0	0	0	174,900	174,900	0	0	0
Principal Global Investors (Equity)	101,116	101,990	187,521	151,463	147,874	146,334	139,560	146,131	151,414	149,115	152,004
Principal Management Corporation	75,505	71,716	109,120	118,346	104,478	104,878	87,970	89,182	74,177	73,789	86,193
Private Advisor Group LLC	17,639	16,680	0	11,504	0	13,867	0	16,785	29,124	26,906	18,906
Private Capital Group, LLC	0	0	0	0	0	165	0	0	0	0	0
Private Ocean, LLC	200	200	200	0	0	0	0	0	0	0	0
PROAKTIVA GmbH	0	0	0	0	0	0	0	0	0	0	0
ProEquities Inc	0	0	0	0	0	0	0	200	200	200	800
Proficio Capital Partners LLC	241	372	524	434	540	266	104	602	1,312	0	0
Profile Sociedade Gestora de Fundos de Investimento Mobiliario SA	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	0	0	0
Pro-Financial Asset Management, Inc	215	215	215	215	215	215	0	0	0	0	0
ProFund Advisors LLC	948	977	1,496	2,747	3,886	3,886	3,886	3,886	3,886	3,886	3,886
Promont AM AG	10,000	10,000	15,000	23,000	23,000	23,000	23,000	18,000	18,000	3,000	3,000
ProShare Advisors LLC	0	0	0	0	0	4,382	4,382	5,032	5,032	5,032	5,032
Pruschke & Kalm GmbH	0	0	0	0	0	10,000	10,000	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44.6%	45.0%	43.2%	39.4%	38.7%	39.4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
PGGM Vermogensbeheer B V	1,164,278	1,115,131	1,115,131	1,115,131	1,115,131	1,420,989
PGIM Investments LLC	0	0	0	654	0	3,215
PGIM Japan Co., Ltd	2,400	0	0	0	0	0
PGIM Quantitative Solutions LLC	12,623	12,623	6,732	7,053	8,155	8,379
Phoenix Holdings Ltd	0	0	0	0	0	0
Picoco, LLC	0	0	0	0	0	0
Pictet & Cie (Europe) S A	16,400	27,400	16,400	16,400	16,400	37,400
Pictet Asset Management Ltd	308,606	1,181,658	1,183,035	2,643,887	1,240,003	1,224,123
Pictet North America Advisors SA	500,000	600,000	600,000	600,000	600,000	600,000
PIMCO (US)	446,619	533,916	1,014,777	998,798	1,377,530	1,153,251
PIMCO Europe Ltd	506	506	506	506	506	506
PineBridge Investments Europe Limited	0	0	0	0	40,851	1,737
PineBridge Investments LLC	0	0	0	0	0	0
Pinnacle Holdings, LLC	0	0	0	16,400	16,400	16,400
Pinnacle Wealth Planning Services, Inc	0	0	0	0	0	935
Pioneer Investment Management SGRpA, NLE	0	0	0	0	0	0
PKB Privat Bank AG	183,750	183,750	133,750	133,750	133,750	133,750
PKO BP BANKOWY Powszechnie Towarzystwo Emerytalne S A	0	0	0	0	0	0
Plutos Vermögensverwaltung AG	0	0	0	0	0	0
PNC Wealth Management	31,426	30,726	29,995	18,329	17,515	19,271
Pocztynion - Arka Powszechnie Towarzystwo Emerytalne S A	86,999	86,999	86,999	86,999	86,999	0
Point72 Asset Management, L P	0	12,077	0	0	0	0
Polaris Wealth Advisory Group, LLC	0	0	0	0	0	0
Popular Gestión Privada S G I I C., S A	0	0	0	0	0	0
PORTFOLIO INVEST Vermögensmanagement GmbH	33,000	33,000	33,000	33,000	33,000	33,000
Portolan Capital Management, L L C	0	0	0	0	0	0
PP Capital Asset Management Fondsmæglerselskab A/S	0	0	0	0	0	0
PP-Asset Management GmbH	0	0	55,000	0	0	0
Prelude Capital Management, LLC	0	0	0	0	0	0
Prima AFP S A	0	0	0	0	0	0
Prime Capital Investment Advisors LLC	0	0	0	0	0	0
Principal Global Investors (Equity)	156,402	153,841	155,500	155,095	151,047	168,226
Principal Management Corporation	37,287	0	57,077	39,621	29,913	24,368
Private Advisor Group LLC	16,125	15,645	15,645	15,645	14,545	14,545
Private Capital Group, LLC	0	0	0	0	0	1,459
Private Ocean, LLC	0	0	0	0	0	0
PROAKTIVA GmbH	0	0	0	0	6,000	6,000
ProEquities Inc	0	0	0	0	0	0
Proficio Capital Partners LLC	0	0	0	0	0	0
Profile Sociedade Gestora de Fundos de Investimento Mobiliario SA	0	0	0	0	0	0
Pro-Financial Asset Management, Inc	0	0	0	0	0	0
ProFund Advisors LLC	3,886	0	0	0	0	0
Promont AM AG	3,000	3,000	0	0	0	0
ProShare Advisors LLC	5,032	5,032	5,032	5,032	3,256	3,256
Prusckie & Kalm GmbH	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41.0%	51.7%	46.2%	46.6%	49.6%	45.8%	44.0%	50.7%	49.0%	43.4%	45.3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
PSP Investments	645,396	578,602	866,033	866,033	857,485	77,951	758,459	746,823	768,303	778,280	918,632
pulse invest GmbH	0	1,800	1,800	0	0	0	0	0	0	0	0
Putnam Investment Management, L.L.C.	666	666	666	666	0	0	0	0	908,767	601,347	0
QS Investors, LLC	8,252	8,252	13,929	14,324	11,492	7,997	30,534	27,922	27,922	27,133	27,133
Quadrant Family Wealth Advisors	1,630	9,426	5,209	8,082	8,489	1,363	1,785	3,224	18,658	25,293	8,215
Quadratic Capital Management LLC	0	0	0	0	0	0	0	0	0	0	160,000
Quadrature Capital LLP	0	641,247	0	0	0	0	0	0	0	0	0
Quant Capital Management GmbH	79,669	79,669	79,669	79,669	79,669	79,669	79,669	0	0	0	0
Quantagon Financial Advisors GmbH	48,070	48,070	48,070	54,010	50,040	61,680	75,440	70,520	70,520	85,670	80,670
Quantbot Technologies, LP	0	0	170,154	16,380	35,443	0	0	0	0	0	0
Quantitative Investment Management LLC	284,700	0	0	0	483,700	0	145,200	0	256,300	0	0
Quantlab Capital Management, LLC	0	0	0	0	0	0	0	0	0	0	0
Qube Research & Technologies Ltd	0	0	0	0	0	0	0	0	0	0	0
Quinn Opportunity Partners LLC	0	0	0	0	0	0	0	0	0	0	145,000
Quorus Vermögensverwaltung AG	22,000	0	0	0	25,500	15,000	29,000	29,000	29,000	29,000	47,300
R & M Vermögensverwaltung GmbH	0	0	0	0	0	0	0	0	0	25,000	25,000
R. H. Bluestein & Company	0	0	20,000	20,000	20,000	20,000	0	0	0	0	0
R. I. Vermögensbetreuung AG	175,000	175,000	250,000	250,000	0	0	0	0	0	0	0
Radin Capital Partners Inc	0	0	0	0	0	0	0	5,463	5,024	4,024	0
Raiffeisen Kapitalanlage-Gesellschaft mbH	387,300	421,600	394,500	461,500	0	0	0	0	0	0	0
Raiffeisen Vermögensverwaltungsbank AG	0	0	0	41,200	41,200	0	0	0	0	0	0
RAM Active Investments S.A.	0	0	0	0	0	0	32,047	32,047	32,047	32,047	32,047
Ravel Capital Management SA	0	0	0	0	113,600	113,600	56,800	56,800	56,800	56,800	56,800
Raymond James & Associates, Inc.	153,498	151,791	117,914	130,549	133,903	111,969	65,681	70,145	29,964	39,253	45,165
Raymond James Financial Services Advisors, Inc.	26,066	26,166	32,479	29,837	29,914	33,814	34,155	33,515	25,728	25,883	18,011
RBC Capital Markets (Canada)	27,594	27,594	27,594	27,594	27,594	27,594	27,594	0	0	0	0
RBC Capital Markets Wealth Management	177,999	3,929	2,000	81,298	147,483	173,029	225,217	199,707	2,925	2,925	13,789
RBC Capital Partners	0	4,934	6,098	6,086	7,103	0	0	0	642	0	0
RBC Dominion Securities, Inc.	62,580	100,029	160,548	158,014	162,723	359,534	348,381	350,314	280,409	13,635	30,090
RBC Global Asset Management Inc	0	0	0	0	0	0	0	0	0	42,713	2,404
RBC Investment Solutions (CI) Limited	6,173	6,173	15,689	15,689	15,689	17,089	17,089	17,089	17,089	17,089	17,089
RBC Phillips, Hager & North Investment Counsel Inc	0	0	0	0	600	600	0	0	0	0	0
RBC Private Counsel (USA) Inc	7,525	4,565	1,400	1,400	1,400	1,400	0	0	0	0	0
RBC Trust Co (International) Ltd	4,555	4,555	4,555	0	0	0	0	0	0	0	0
RBC Trust Co (Jersey) Ltd	1,217	1,217	1,217	0	0	0	0	0	0	0	0
RBC Wealth Management, International	1,805,667	1,165,188	2,190,909	1,833,591	586,586	619,614	377,732	18,628	988,698	629,633	829,501
RBV GmbH	17,500	27,500	36,250	41,250	41,250	41,250	41,250	41,250	41,250	41,250	41,250
Real Estate Management Services Group, LLC	0	0	0	0	0	0	0	0	0	0	0
ReAssure Limited	0	0	190,920	179,888	255,535	413,484	390,706	481,082	444,435	86	85
Regent Peak Wealth Advisors, LLC	0	0	0	0	0	0	0	0	0	0	0
Regent Atlantic Capital, L.L.C.	0	0	0	0	0	0	0	0	0	0	0
Regions Investment Management, Inc.	0	0	0	0	250	250	215	0	0	0	0
Reichmuth & Co	29,170	29,170	39,170	39,170	39,170	50,000	60,000	60,000	60,000	60,000	80,000
Reilly Financial Advisors, LLC	34	34	34	34	34	34	34	34	34	34	34
Renaissance Technologies LLC	1,274,138	3,971,796	1,350,438	2,230,182	914,338	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44.6%	45.0%	43.2%	39.4%	38.7%	39.4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
PSP Investments	1,035,533	996,112	988,630	983,003	983,003	971,362
pulse invest GmbH	0	0	0	0	0	0
Putnam Investment Management, L.L.C.	0	0	0	0	0	0
QS Investors, LLC	27,133	27,133	27,133	11,086	11,086	11,086
Quadrant Family Wealth Advisors	35,953	10,446	11,210	3,513	5,335	4,492
Quadratic Capital Management LLC	160,000	160,000	160,000	160,000	160,000	0
Quadrature Capital LLP	0	0	0	0	0	0
Quant Capital Management GmbH	0	0	0	0	0	0
Quantagon Financial Advisors GmbH	42,330	3,080	3,260	4,080	3,240	0
Quantbot Technologies, LP	0	9,378	3,100	3,600	0	12,509
Quantitative Investment Management LLC	97,209	155,403	0	10,965	0	0
Quantlab Capital Management, LLC	0	0	0	0	21,740	0
Qube Research & Technologies Ltd	0	0	0	10,309	60,576	80,938
Quinn Opportunity Partners LLC	469,000	469,000	469,000	469,000	28,243	24,243
Quorus Vermögensverwaltung AG	47,300	47,300	33,300	0	0	0
R & M Vermögensverwaltung GmbH	25,000	0	0	0	42,200	0
R. H. Bluestein & Company	0	0	0	0	0	0
R.I. Vermögensbetreuung AG	0	0	0	0	0	0
Radin Capital Partners Inc	0	0	0	0	0	0
Raiffeisen Kapitalanlage-Gesellschaft mbH	0	0	0	0	0	0
Raiffeisen Vermögensverwaltungsbank AG	0	0	0	0	0	0
RAM Active Investments S.A.	32,047	32,047	32,047	0	0	0
Ravel Capital Management SA	56,800	56,800	56,800	0	0	0
Raymond James & Associates, Inc	44,165	49,282	59,093	60,195	53,797	60,570
Raymond James Financial Services Advisors, Inc	28,010	29,505	16,436	16,681	11,008	12,829
RBC Capital Markets (Canada)	0	0	0	0	0	0
RBC Capital Markets Wealth Management	396,225	5,400	5,150	5,350	5,150	10,150
RBC Capital Partners	0	0	0	0	28	0
RBC Dominion Securities, Inc	20,090	20,250	20,646	1,178	1,178	1,730
RBC Global Asset Management Inc	0	0	0	0	1,302	242,398
RBC Investment Solutions (CI) Limited	17,089	17,089	17,089	17,089	17,089	17,089
RBC Phillips, Hager & North Investment Counsel Inc	0	0	0	0	840	0
RBC Private Counsel (USA) Inc	0	0	0	0	0	0
RBC Trust Co (International) Ltd	0	0	0	0	0	0
RBC Trust Co (Jersey) Ltd	0	0	0	0	0	0
RBC Wealth Management, International	457,458	2,047,901	2,250,458	1,867,587	2,057,092	1,543,037
RBV GmbH	41,250	41,250	39,969	41,250	41,250	45,750
Real Estate Management Services Group, LLC	0	0	0	0	0	52,000
ReAssure Limited	82	3,776	3,627	3,580	3,488	3,449
Regent Peak Wealth Advisors, LLC	0	0	0	0	0	97
Regent Atlantic Capital, L.L.C.	0	0	0	0	53,316	53,316
Regions Investment Management, Inc	0	0	0	0	0	0
Reichmuth & Co	80,000	80,000	80,000	80,000	60,000	30,000
Reilly Financial Advisors, LLC	34	34	34	34	0	0
Renaissance Technologies LLC	0	0	0	0	0	744,720

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Renta 4 Gestora, S G I I C , S A	9,350	24,350	24,350	24,350	24,350	24,350	24,350	24,350	24,350	0	0
Research Affiliates, LLC	0	0	0	6,542	3,282	1,700	3,125	2,149	2,149	3,322	3,767
Resona Asset Management Co , Ltd	0	0	0	0	2,544	2,544	2,544	2,544	2,544	2,544	2,544
Resona Bank, Ltd	0	558	558	558	558	2,333	2,333	2,333	2,333	2,258	2,258
Reuss Private AG	49,000	18,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	80,000
Rhein Asset Management (Lux) S A	0	0	4,500	0	0	0	0	0	0	0	0
Richelieu Gestion S A	9,050	4,000	6,000	6,000	0	0	0	0	0	0	0
River and Mercantile Asset Management LLP	49,130	64,255	0	106,282	106,282	104,699	0	0	0	0	0
Riverhead Capital Management LLC	8,400	8,400	8,400	8,400	8,400	8,400	8,400	9,850	14,100	14,100	16,800
RMB Capital Management, LLC	0	0	0	0	0	571	372	0	0	0	58
Robeco Institutional Asset Management B V	4,294	7,070	6,441	6,441	6,441	3,124	0	0	0	0	0
RobecoSAM AG	0	0	0	0	0	0	0	0	0	100,000	100,000
Robert Beer Investment GmbH	0	27,000	27,000	27,000	78,500	78,500	0	0	0	0	0
Rock Creek Group, L P	0	0	2,381	0	0	0	0	0	0	0	0
Rockefeller Capital Management	0	0	0	0	0	0	0	0	0	3,949	0
RoseCap Investment Advisors, LLC	0	0	0	0	0	0	0	0	0	0	0
Rossier, Mari & Associates Ltd	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000
Rossmore Private Capital, LLC	0	0	0	0	365	0	0	0	0	0	0
Royal Bank of Canada Trust Co (Bahamas) Ltd	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0	0	0	0
Royal London Asset Management Ltd	181,363	166,502	287,253	234,728	254,149	211,406	263,187	257,244	298,835	254,938	286,517
RPg Family Wealth Advisory, LLC	622	0	0	0	0	0	0	0	0	0	0
Ruffer LLP	0	0	0	0	0	0	0	0	106,500	106,500	106,500
Russell Investments Canada Limited	14,870	2,387	63,914	63,914	28,696	1,820	10,912	10,912	10,912	0	0
Russell Investments Limited	0	7,696	62,960	78,871	0	0	1,400	1,400	1,400	1,400	1,400
Russell Investments Trust Company	251,942	407,016	1,029,335	919,638	1,687,209	463,061	40,907	40,907	33,430	556,974	647,997
S W Mitchell Capital LLP	0	0	0	0	0	0	0	0	0	0	0
Saba Capital Management, L P	0	0	0	0	0	0	0	0	531,900	226,790	102,090
Sage Financial Group, Inc	0	500	500	500	500	1,000	0	1,000	1,000	3,000	0
Sal. Oppenheim jr & Cie AG & Co KGaA (Asset Management)	52,162	35,474	23,650	23,650	260,825	478,648	443,540	5,325	5,325	5,325	5,325
Salm-Salm & Partner GmbH	0	0	0	27,090	27,090	27,090	27,090	27,090	0	0	0
Samalin Investment Counsel, LLC	0	0	0	0	0	0	0	0	0	0	0
Samsung Asset Management Co , Ltd	8,411	10,192	12,063	10,255	11,973	15,052	27,664	20,394	23,342	28,425	28,425
San Francisco Sentry Investment Group	0	0	7,300	7,300	7,300	0	0	0	0	0	0
Sandler Capital Management	0	0	0	0	19,300	0	0	0	0	0	0
Sanlam Investment Management (Pty) Ltd	63,972	38,078	60,336	60,336	53,006	53,006	47,886	47,886	47,886	80,656	88,346
Sanlam Investments UK Limited	17,291	17,125	25,906	25,668	49,283	58,903	40,140	23,115	23,115	19,014	0
Sanoor Capital Management LP, NLE	0	353,400	0	0	0	0	0	0	0	0	0
Santander Asset Management	315,517	363,647	417,101	210,664	210,664	197,119	199,121	5,801	5,150	5,150	5,150
Santander Asset Management UK Limited	18,321	13,008	17,060	15,228	5,616	3,821	0	0	0	0	0
Santander Private Banking Gestion, S A , S G I I C	147,770	147,770	154,770	154,770	21,370	21,370	21,000	21,000	47,851	21,000	0
Santori & Peters	0	0	0	0	152	0	0	0	0	0	0
Sargent Investment Group, LLC	0	0	0	0	0	0	0	0	0	0	0
Savior Wealth	0	0	0	0	0	0	0	0	0	0	0
Sawtooth Asset Management, Inc	1,596	1,596	0	0	0	0	0	0	0	0	0
S-Bank Fund Management Ltd	0	0	0	0	0	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

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Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Renta 4 Gestora, S G I I C , S A	0	0	0	0	0	800
Research Affiliates, LLC	4,218	3,113	2,744	3,618	10,166	9,787
Resona Asset Management Co , Ltd	2,544	0	2,265	2,265	2,265	2,265
Resona Bank, Ltd	2,258	2,258	2,258	2,258	2,258	0
Reuss Private AG	84,300	64,300	66,800	46,800	46,800	47,100
Rhein Asset Management (Lux) S A	0	0	0	0	0	0
Richelieu Gestion S A	0	0	0	0	0	0
River and Mercantile Asset Management LLP	0	0	0	0	0	0
Riverhead Capital Management LLC	16,800	16,800	16,800	16,800	16,800	16,800
RMB Capital Management, LLC	0	12,512	12,059	11,800	0	0
Robeco Institutional Asset Management B V	0	0	0	105,672	105,672	115,911
RobecoSAM AG	100,000	150,000	200,000	200,000	175,000	175,000
Robert Beer Investment GmbH	0	0	0	0	0	0
Rock Creek Group, L P	0	0	0	0	0	0
Rockefeller Capital Management	0	0	0	0	255	170
RoseCap Investment Advisors, LLC	0	0	0	4,000	4,000	4,000
Rossier, Mari & Associates Ltd	45,000	45,000	10,000	10,000	10,000	10,000
Rossmore Private Capital, LLC	0	0	0	0	0	0
Royal Bank of Canada Trust Co (Bahamas) Ltd	0	0	0	0	0	0
Royal London Asset Management Ltd	305,390	305,390	305,390	278,573	258,693	258,693
RPg Family Wealth Advisory, LLC	0	0	0	0	0	0
Ruffer LLP	106,500	106,500	106,500	106,500	106,500	106,500
Russell Investments Canada Limited	0	0	0	0	0	0
Russell Investments Limited	24,924	241,861	235,961	235,961	358,873	397,575
Russell Investments Trust Company	624,785	2,127,580	2,388,730	3,044,338	3,044,338	3,143,316
S W Mitchell Capital LLP	0	709,253	902,780	902,780	810,186	810,186
Saba Capital Management, L P	0	0	0	0	0	0
Sage Financial Group, Inc	3,000	3,000	4,814	4,814	4,814	4,814
Sal. Oppenheim jr. & Cie. AG & Co. KGaA (Asset Management)	5,325	5,325	5,325	5,325	0	0
Salm-Salm & Partner GmbH	0	0	0	0	0	0
Samalin Investment Counsel, LLC	0	0	0	0	2,759	2,759
Samsung Asset Management Co , Ltd	31,777	28,649	23,566	25,134	24,988	21,876
San Francisco Sentry Investment Group	0	0	0	0	0	0
Sandler Capital Management	0	0	0	0	0	0
Sanlam Investment Management (Pty) Ltd	88,346	88,346	88,346	59,208	59,208	59,208
Sanlam Investments UK Limited	0	0	0	0	0	0
Sanoor Capital Management LP, NLE	0	0	0	0	0	0
Santander Asset Management	5,150	0	0	0	27,004	0
Santander Asset Management UK Limited	0	0	0	15,164	17,628	17,628
Santander Private Banking Gestion, S A , S G I I C	0	0	0	0	0	370
Santori & Peters	0	0	0	0	0	0
Sargent Investment Group, LLC	20,000	24,000	10,000	10,000	10,000	10,000
Savior Wealth	0	31,441	1,678	0	0	0
Sawtooth Asset Management, Inc	0	0	0	0	0	0
S-Bank Fund Management Ltd	17,539	19,676	26,829	13,471	12,763	13,914

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Schellhammer Capital Bank AG	0	0	0	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Schneider, Walter & Kollegen Vermögensverwaltung AG	6,000	6,000	6,000	6,000	6,000	12,500	12,500	12,500	12,500	12,500	12,500
Schmieders Capital Management, LLC	0	0	0	0	0	0	0	14,425	0	0	0
Schoellerbank Invest AG	107,200	82,000	80,000	120,000	120,000	0	0	0	0	2,000	4,000
Schonfeld Strategic Advisors LLC	0	0	0	0	0	0	0	0	0	0	0
Schroder & Co. Bank AG	0	0	0	0	0	0	4,950	4,950	4,950	0	2,500
Schroder Investment Management (Europe) S.A.	7,458	7,458	7,458	7,458	13,080	13,080	13,080	2,836	2,836	9,296	7,476
Schroder Investment Management (Switzerland) AG	15,857	15,857	15,857	0	13,080	13,080	13,080	2,836	2,836	9,296	7,476
Schroder Investment Management Ltd (SIM)	1,699,871	1,522,292	1,922,855	1,630,463	3,740,760	4,439,315	3,905,493	4,049,184	3,950,907	4,397,855	3,923,371
Schroder Investment Management North America Inc	298,506	298,506	205,691	230,751	609,989	1,049,155	988,174	944,282	955,765	1,346,582	1,343,341
Schroders Private Bank	22,182	22,182	32,798	8,948	8,948	0	0	0	0	0	0
Sciencast Management LP	0	45,417	59,596	46,055	32,759	29,452	0	0	29,800	0	0
Scotia Capital Inc	0	0	12,895	0	0	0	0	0	0	0	0
Scottish Friendly Asset Managers Limited	0	0	0	0	0	0	0	0	0	0	0
Sculptor Capital Management, Inc	991,100	0	0	0	0	0	0	0	0	1,342,600	1,348,600
SEB Investment Management AB	181,052	345,664	790,925	568,661	675,794	373,296	385,128	355,074	333,259	0	0
Security Kapitalanlage AG	110,572	112,400	159,996	159,996	146,674	146,674	146,674	134,174	134,174	138,958	138,958
Segantini Capital Management Limited	0	110,000	0	0	0	0	0	0	0	0	0
SEI Investments Canada	0	0	0	0	0	0	0	0	0	0	0
SEI Investments Management Corporation	5,159	5,521	8,278	10,536	11,076	13,292	19,154	0	0	2	0
Selection Asset Management GmbH	0	0	0	0	0	0	0	6,100	100	100	0
Seligson & Co Rahastoyhtiö Oyj	49,677	50,337	78,276	82,276	82,276	84,376	85,276	78,276	80,976	80,976	82,576
Sella SGR S.p.A.	0	0	3,000	9,000	0	3,500	0	0	0	0	0
Seminole Management Company, Inc. NLE	22,200	0	0	0	0	0	0	0	0	0	0
sentix Asset Management GmbH	9,540	12,660	12,660	15,260	15,260	21,330	17,750	17,750	17,750	18,350	18,350
Senvest Management, LLC	0	0	0	0	170,000	90,000	0	0	0	0	0
Seven Eight Capital, LP	0	1	0	0	0	0	0	0	0	0	0
Seven Investment Management LLP	0	0	204,020	93,204	0	0	0	0	0	0	0
SG Americas Securities, L.L.C.	577,934	230,711	250,225	83,983	224,736	395,961	737,715	469,912	617,233	79,168	920,559
SGJ Management, LLC	0	90,000	0	0	0	0	0	0	0	0	0
Shah Capital Management, Inc	568,500	566,300	681,750	678,150	0	0	0	0	1,301,868	371,868	169,639
Shelton Capital Management	3,484	3,484	3,484	3,484	3,484	0	0	0	0	0	0
Siemens Fonds Invest GmbH	100,810	27,342	39,673	54,725	53,050	53,050	53,050	53,050	303,552	375,189	396,442
Signal Iduna Asset Management GmbH	0	0	290,000	0	0	180,000	0	0	0	0	0
Signator Financial Services, Inc	0	0	0	0	2,154	2,220	2,154	0	0	0	0
Signaturefd, LLC	0	0	0	0	0	3,667	3,743	4,278	6,506	4,566	11,954
Simplex Trading, LLC	0	151,303	0	146,559	113,404	28,985	34,914	0	87,602	0	0
Singular Asset Management SGIC SA	1,500	1,500	1,500	1,500	1,500	1,500	0	0	0	0	0
SinoPac Securities Investment Trust Co., Ltd	13,542	13,542	15,979	15,979	8,681	8,681	3,649	3,649	0	0	0
Sjunde AP-fondén	1,239,952	1,288,217	2,029,655	2,029,655	2,061,748	2,168,694	2,168,694	2,168,694	2,168,694	2,168,694	2,168,694
SKALIS Asset Management AG	13,866	15,229	45,229	55,142	49,609	43,718	42,411	0	0	0	0
Skandia Fonder AB	8,548	8,548	12,822	17,124	17,124	17,124	17,124	17,124	17,124	17,124	17,124
SMS & Cie. Vermögensmanagement GmbH	0	0	0	0	0	0	0	0	0	0	0
Société Générale Gestion	6,626	6,626	8,014	8,014	93,024	86,530	44,140	10,423	9,849	10,511	9,834
Société Générale Private Banking	502,090	502,090	502,090	502,090	502,090	502,090	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44.6%	45.0%	43.2%	39.4%	38.7%	39.4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Schellhammer Capital Bank AG	50,000	0	0	0	0	0
Schneider, Walter & Kollegen Vermögensverwaltung AG	12,500	12,500	12,500	12,500	12,500	12,500
Schneiders Capital Management, LLC	0	0	0	0	0	0
Schoellerbank Invest AG	0	12,000	0	0	1,000	4,000
Schonfeld Strategic Advisors LLC	0	0	16,800	0	0	0
Schroder & Co. Bank AG	0	0	0	1,000	0	0
Schroder Investment Management (Europe) S.A.	4,859	4,859	4,859	4,859	4,859	4,859
Schroder Investment Management (Switzerland) AG	4,859	4,859	0	0	9,357	9,357
Schroder Investment Management Ltd (SIM)	3,389,492	3,103,432	2,419,447	1,385,774	1,225,368	948,277
Schroder Investment Management North America Inc	1,042,216	1,016,249	810,424	826,067	736,893	1,645,667
Schroders Private Bank	0	0	0	0	0	0
Sciencast Management LP	0	0	0	0	0	10,200
Scotia Capital Inc	0	0	0	0	0	0
Scottish Friendly Asset Managers Limited	0	1,105	1,105	1,173	1,215	1,186
Sculptor Capital Management, Inc	1,346,900	0	0	0	0	0
SEB Investment Management AB	0	295,348	444,543	361,042	521,097	526,243
Security Kapitalanlage AG	138,958	138,958	125,119	133,519	136,519	175,716
Segantini Capital Management Limited	0	0	0	0	0	0
SEI Investments Canada	0	0	0	0	0	75,735
SEI Investments Management Corporation	0	0	12,491	0	0	135,339
Selection Asset Management GmbH	0	0	0	0	0	0
Seligson & Co Rahastoyhtiö Oyj	0	0	0	0	0	0
Sella SGR S.p.A.	0	0	0	0	0	0
Seminole Management Company, Inc. NLE	0	0	0	0	0	0
sentix Asset Management GmbH	19,960	19,960	19,960	11,150	11,480	11,480
Senvest Management, LLC	0	0	0	0	0	0
Seven Eight Capital, LP	0	0	0	0	0	0
Seven Investment Management LLP	0	0	0	0	0	0
SG Americas Securities, L.L.C.	873,157	388,678	868,574	209,925	822,027	285,390
SG3 Management, LLC	0	0	0	30,000	10,000	10,000
Shah Capital Management, Inc	169,639	169,639	0	0	0	0
Shelton Capital Management	0	0	0	0	0	0
Siemens Fonds Invest GmbH	408,145	425,236	424,199	390,723	394,205	360,489
Signal Iduna Asset Management GmbH	0	0	0	160,000	160,000	160,000
Signator Financial Services, Inc	0	0	0	0	0	0
Signaturefd, LLC	11,026	9,629	4,545	4,373	4,373	5,147
Simplex Trading, LLC	0	0	38,202	17,759	24,003	0
Singular Asset Management SGIC SA	0	0	0	0	0	0
SinoPac Securities Investment Trust Co., Ltd	0	0	0	0	0	0
Sjunde AP-fonden	2,168,694	2,168,694	2,168,694	0	0	0
SKALIS Asset Management AG	0	0	0	0	0	0
Skandia Fonder AB	23,475	23,475	28,115	33,231	33,231	23,475
SMS & Cie. Vermögensmanagement GmbH	0	17,500	17,500	17,500	17,500	17,500
Société Générale Gestion	9,834	7,116	7,116	0	0	0
Société Générale Private Banking	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Sofos Investments, Inc	0	0	0	0	14	17	14	14	14	51	19
Solidus Securities S A	110,000	110,000	0	0	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Source For Alpha (Deutschland) AG	0	0	0	26,000	31,000	0	0	0	29,000	0	0
Sovamum Capital L P	0	0	0	0	17,799	17,799	15,163	0	0	0	0
Sparinvest S A	34,768	1,800	1,800	1,800	0	0	0	0	0	0	0
Spartan Fund Management Inc	0	0	0	0	0	0	0	0	30,400	30,400	30,400
SpiderRock Advisors LLC	0	2,527	0	0	0	0	0	0	0	0	0
Spot Trading LLC NLE	184,514	0	14,549	47,716	47,716	47,716	47,716	47,716	47,716	0	0
Spurkess Asset Management	57,364	57,364	57,364	0	0	0	0	0	0	0	0
SPX Capital	0	0	0	0	0	0	0	0	110,378	0	0
SPX Equities Gestão de Recursos, Ltda	0	0	0	0	0	0	0	278,065	0	0	0
Squarepoint Capital LLP	0	0	0	0	0	0	0	0	0	0	0
St. Galler Kantonbank AG	1,578	1,578	1,578	1,989	1,989	1,989	1,989	1,989	1,989	1,989	1,989
St. James's Place Wealth Management Plc	123,411	123,411	123,411	123,411	123,411	123,411	123,411	0	0	0	0
Stadtsparkasse Düsseldorf	89,900	89,900	89,900	86,800	86,800	56,800	56,800	56,800	56,800	56,800	56,800
Stamos Capital Partners, L P	0	0	0	0	0	0	0	0	32,000	0	0
StarCapital AG	70,000	70,000	470,000	256,000	250,000	250,000	400,000	343,000	343,000	207,000	100,000
State Farm Insurance Companies	0	0	0	0	0	0	0	8,601	0	0	0
State of Wisconsin Investment Board	1,148,140	1,080,045	2,483,514	2,468,812	1,233,204	2,380,820	1,776,604	1,085,141	870,485	585,167	17,607
State Street Global Advisors (France) S A	105,843	100,533	138,161	134,708	108,321	108,321	108,320	107,164	86,050	55,305	55,494
State Street Global Advisors (Japan) Co., Ltd	65,279	65,279	65,279	65,279	72,105	72,105	72,105	72,105	93,812	93,812	93,812
State Street Global Advisors (UK) Ltd	1,766,211	2,459,257	2,728,239	3,011,045	3,087,508	5,112,552	5,092,086	5,332,234	5,203,383	4,088,243	3,995,126
State Street Global Advisors (US)	2,439,372	3,333,976	4,691,879	4,800,124	4,748,478	5,005,888	4,669,422	2,144,254	2,260,350	2,333,403	2,405,064
State Street Global Advisors Australia Ltd	0	0	0	0	6,248	6,248	15,179	15,179	15,920	15,920	15,920
State Street Global Advisors Ireland Limited	649,918	777,501	768,689	1,183,516	1,156,045	1,733,169	1,614,254	1,562,508	1,479,558	1,281,862	1,195,688
State Street Global Advisors Ltd (Canada)	28,619	28,619	173,598	188,087	168,485	177,932	203,111	203,111	202,789	56,894	61,042
Sterneck Capital Management, LLC	0	0	0	0	0	91,700	75,980	68,610	0	0	0
Steward Partners Investment Advisory, LLC	0	0	0	0	0	0	1,500	1,500	0	0	8
Stifel Nicolaus Investment Advisors	0	0	0	0	0	0	0	16,224	0	13,040	11,011
Stonebridge Capital Advisors, LLC	0	0	0	0	0	0	0	0	0	0	5,650
Storebrand Kapitalforvaltning AS	650,375	810,306	1,165,409	1,148,707	1,074,515	1,174,264	1,148,716	1,282,749	1,291,731	1,346,002	1,423,858
Straits Invest Pte Ltd	2,602	2,602	2,602	2,602	2,602	0	0	0	0	0	0
Strategic Wealth Management Group	62,896	63,232	63,981	64,324	64,671	63,523	65,946	0	0	0	91,226
Stratos Wealth Partners, Ltd	0	0	0	0	5,836	2,136	0	2,254	0	0	0
Structured Invest S A	1,439,180	352,650	1,205,900	1,205,900	983,000	983,000	159,000	159,000	159,000	159,000	159,000
Studio Gaffino Società di Intermediazione Mobiliare per Azioni	0	0	0	15,000	6,000	0	0	0	0	0	0
Sumitomo Mitsui DS Asset Management Company, Limited	19,774	19,774	19,774	19,774	29,436	29,436	29,436	29,436	25,955	25,955	25,955
Sumitomo Mitsui Trust Asset Management Co., Ltd	87,246	91,146	91,423	91,423	91,423	91,423	91,269	91,269	91,269	91,269	1,020
Summit Trail Advisors, LLC	0	0	0	0	3,570	0	0	0	0	0	0
SunAmerica Asset Management, LLC	0	0	0	0	254,989	251,829	238,889	223,654	215,196	217,640	212,718
Susquehanna International Group, LLP	1,717,072	3,603,650	1,363,500	2,237,380	2,765,831	4,306,496	1,938,559	2,259,500	2,134,319	321,011	839,544
Susquehanna International Securities Ltd	0	0	0	0	0	0	0	0	0	0	0
SVA Vermögensverwaltung Stuttgart GmbH	0	0	0	10,000	0	0	0	0	0	0	0
Swan Asset Management SA	2,000	0	0	0	0	0	0	0	0	0	0
Swedbank Robur Fonder AB	849,813	525,644	728,130	728,130	194,552	209,765	219,061	219,061	241,110	241,110	328,180

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Sofos Investments, Inc	25	20	0	0	0	0
Solidus Securities S A	40,000	0	0	0	0	0
Source For Alpha (Deutschland) AG	40,500	38,500	7,500	7,500	7,500	7,500
Sovamum Capital L P	0	0	0	0	0	0
Sparinvest S A	0	0	69,520	65,291	65,291	72,598
Spartan Fund Management Inc	30,400	30,400	30,400	0	0	0
SpiderRock Advisors LLC	0	0	0	0	0	0
Spot Trading LLC NLE	0	0	0	0	0	0
Spurkess Asset Management	0	0	0	0	0	0
SPX Capital	0	0	0	0	0	0
SPX Equities Gestão de Recursos, Ltda	0	0	0	0	0	0
Squarepoint Capital LLP	0	147,403	0	0	64,686	0
St. Galler Kantonalbank AG	1,989	1,989	0	0	0	0
St. James's Place Wealth Management Plc	0	0	0	0	0	0
Stadtsparkasse Düsseldorf	56,800	56,800	68,160	0	0	30,000
Stamos Capital Partners, L P	0	0	0	0	0	0
StarCapital AG	100,000	100,000	100,000	0	0	0
State Farm Insurance Companies	0	0	0	0	0	0
State of Wisconsin Investment Board	0	992,743	906,242	834,853	789,710	692,175
State Street Global Advisors (France) S A	56,029	58,169	59,813	80,636	52,661	53,277
State Street Global Advisors (Japan) Co., Ltd	93,812	94,020	94,020	94,020	94,020	19,526
State Street Global Advisors (UK) Ltd	3,927,747	3,906,776	4,121,643	4,170,099	3,897,491	3,854,530
State Street Global Advisors (US)	2,487,541	2,571,955	2,720,531	2,830,995	2,874,609	3,188,144
State Street Global Advisors Australia Ltd	15,920	15,920	6,989	6,989	6,989	6,989
State Street Global Advisors Ireland Limited	1,188,250	1,203,140	1,431,847	1,327,187	1,354,164	1,565,016
State Street Global Advisors Ltd (Canada)	61,042	61,042	61,042	68,150	68,150	72,196
Sterneck Capital Management, LLC	0	0	0	0	0	0
Steward Partners Investment Advisory, LLC	8	5	0	105	0	0
Stifel Nicolaus Investment Advisors	14,815	14,120	14,031	56,932	54,579	54,617
Stonebridge Capital Advisors, LLC	4,950	4,150	2,850	1,500	0	0
Storebrand Kapitalforvaltning AS	1,554,703	1,550,515	1,495,236	1,379,973	1,335,417	1,406,549
Straits Invest Pte Ltd	0	0	0	0	0	0
Strategic Wealth Management Group	0	0	0	0	0	0
Stratos Wealth Partners, Ltd	0	0	0	0	0	0
Structured Invest S A	159,000	159,000	159,000	0	0	59,174
Studio Gaffino Società di Intermediazione Mobiliare per Azioni	0	0	0	0	0	0
Sumitomo Mitsui DS Asset Management Company, Limited	25,955	49,039	49,039	49,039	49,039	61,531
Sumitomo Mitsui Trust Asset Management Co., Ltd	1,020	1,020	1,020	998	998	998
Summit Trail Advisors, LLC	0	0	0	0	0	0
SunAmerica Asset Management, LLC	212,718	219,671	219,543	268,959	268,392	268,071
Susquehanna International Group, LLP	149,366	813,662	149,366	216,568	149,372	150,031
Susquehanna International Securities Ltd	0	37,892	1,537,660	306,800	214,400	0
SVA Vermögensverwaltung Stuttgart GmbH	0	0	0	0	0	0
Swan Asset Management SA	0	0	0	0	0	0
Swedbank Robur Fonder AB	328,180	328,180	304,472	347,776	348,535	371,421

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Swedbank S A	20,000	20,000	30,000	30,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Swiss Life Asset Management	7,650	7,650	7,650	7,650	7,650	7,650	7,650	11,265	48,987	56,844	56,844
Swiss Life Asset Managers France	18,470	0	0	0	0	0	0	0	0	0	0
Swiss Rock Asset Management AG	0	17,967	21,995	21,995	14,535	12,173	12,173	12,173	12,173	12,173	12,173
Swiss Wealth Management SA	0	5,000	0	0	0	0	0	0	0	0	0
Swisscanto Fondsleitung AG	202,778	0	49,464	52,848	51,384	50,082	43,285	39,691	32,329	35,215	31,328
swisspartners Ltd	0	0	0	0	0	0	0	0	0	0	0
Sydinvest	0	0	60,000	100,000	0	0	0	0	0	0	0
Symphonia SGR Spa	257,063	302,511	408,784	458,971	363,513	442,664	242,756	242,756	205,022	170,000	154,000
Synovus Trust Company, N A	309	309	0	0	0	309	309	309	309	309	309
SYZ Asset Management Suisse SA	0	0	325,300	325,300	0	0	0	0	0	0	0
T Rowe Price Associates, Inc	27,100	27,100	40,650	40,650	0	0	0	0	0	0	0
T Rowe Price International (UK) Ltd	50,295	67,118	75,670	68,430	71,118	68,892	69,214	70,027	76,151	78,162	78,162
Tangerine Investment Management Inc	11,303	11,303	11,303	11,303	11,303	11,303	0	0	0	0	0
Taylor Hoffman Wealth Management, LLC	0	0	0	0	1,000	1,000	1,000	1,000	1,000	1,000	0
TB Alternative Assets Ltd	0	0	0	0	0	0	0	0	0	1,314,300	0
TCI Wealth Advisors, Inc	300	300	300	300	300	300	300	300	300	300	300
TD Asset Management Inc	53,765	1,017,842	86,142	86,142	90,837	91,367	552,647	92,576	572,690	94,288	575,066
TD Securities, Inc	0	0	0	0	0	139,605	160,844	147,912	234,197	33,910	0
Telemetry Investments, L L C	0	0	0	31,099	0	13,211	21,147	0	0	0	0
Telemus Capital, LLC	86,820	85,000	94,000	0	0	0	0	0	0	0	0
Tellus Fonder AB	3,000	3,500	3,500	6,500	3,300	1,500	750	750	750	750	750
Templeton Investment Counsel, L L C	16,941	16,941	24,523	23,970	23,256	3,200	0	0	20,503	20,503	19,748
Terra Nova Asset Management LLC	0	36,725	49,500	48,000	47,000	46,300	38,800	34,500	0	0	0
The Bolland Group, LLC	10,887	10,887	10,887	10,887	10,887	10,900	15,200	19,500	19,500	19,500	19,500
The Harvest Group Wealth Management, LLC	0	0	0	0	17,075	18,482	20,507	20,947	20,245	20,476	20
The Institute for Wealth Management, LLC	0	0	0	0	0	0	0	0	0	0	0
The MassMutual Trust Company, FSB	0	0	0	0	0	0	0	0	0	0	0
The Nalls Sherbakoff Group, LLC	0	0	0	0	0	0	0	0	207	207	207
The National Farmers Union Mutual Insurance Society Limited	305,000	305,000	305,000	305,000	305,000	305,000	0	0	0	0	0
The Royal Bank of Scotland Plc (London)	219,121	219,121	219,121	219,121	271,805	125,081	0	0	270,568	182,066	182,066
The Vanguard Group, Inc	31,370,491	32,712,912	51,569,214	48,197,295	49,837,810	51,174,890	52,923,823	54,018,722	59,593,865	59,767,255	61,242,713
THEAM NLE	4,799,161	4,960,259	997,854	1,050,604	0	0	0	0	0	0	0
Theodoor Gilissen Bankiers N V (Asset Management) NLE	180,600	0	0	0	0	0	0	0	0	0	0
Third Avenue Management LLC	0	0	400,000	500,000	600,000	700,000	322,000	0	0	2,290,121	2,290,121
Thomas White International, Ltd	11,705	11,705	11,705	11,705	11,705	11,705	0	0	0	0	0
Thornburg Investment Management, Inc	40,700	1,436,323	1,376,595	1,313,847	0	0	0	0	0	0	0
Thurgauer Kantonalbank	0	0	2,233	454	426	508	521	599	613	0	681
Tibra Equities Europe, Ltd	0	0	0	0	0	0	0	943,467	0	0	0
TIFF Advisory Services, Inc	4,764	4,244	6,366	4,664	4,038	0	0	0	0	0	0
Tiger Asset Management GmbH	0	0	0	0	7,200	10,000	8,500	8,500	8,500	8,500	8,500
TimeScale Financial, Inc	0	0	0	0	0	0	0	0	0	0	244
Tokio Marine Asset Management Co , Ltd	0	26,600	48,600	48,600	48,600	48,600	48,600	48,600	48,600	60	133
Tontine Asset Management, LLC	2,055,838	1,358,423	2,414,349	2,321,965	2,323,102	60,000	660,000	788,400	0	32,225	0
TOP Vermögen AG	0	0	0	0	0	0	0	0	0	6,000	6,000

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Swedbank S A	35,000	35,000	0	0	0	0
Swiss Life Asset Management	9,269	12,334	12,334	16,202	16,202	16,202
Swiss Life Asset Managers France	72,266	72,266	0	0	0	0
Swiss Rock Asset Management AG	12,173	12,173	12,173	12,173	12,173	12,173
Swiss Wealth Management SA	0	0	0	0	0	0
Swisscanto Fondsleitung AG	33,873	0	0	0	0	0
swisspartners Ltd	0	0	0	0	0	25,100
Sydinvest	0	0	0	140,160	0	0
Symphonia SGR Spa	154,000	154,000	154,000	154,000	154,000	154,000
Synovus Trust Company, N A	309	309	309	309	0	0
SYZ Asset Management Suisse SA	0	0	0	0	0	0
T Rowe Price Associates, Inc	0	0	0	0	0	0
T Rowe Price International (UK) Ltd	78,162	76,151	76,151	76,194	73,905	79,543
Tangerine Investment Management Inc	0	0	0	0	0	0
Taylor Hoffman Wealth Management, LLC	0	0	0	0	0	0
TB Alternative Assets Ltd	0	0	284,900	0	0	0
TCI Wealth Advisors, Inc	300	0	0	0	0	0
TD Asset Management Inc	97,743	524,286	525,787	503,429	503,744	464,310
TD Securities, Inc	0	0	0	0	0	0
Telemetry Investments, L L C	0	0	0	0	0	0
Telemus Capital, LLC	0	0	0	0	0	0
Tellus Fonder AB	750	750	750	0	0	0
Templeton Investment Counsel, L L C	19,748	18,860	18,178	18,178	18,178	18,178
Terra Nova Asset Management LLC	0	0	0	0	0	0
The Bolland Group, LLC	0	0	0	0	0	0
The Harvest Group Wealth Management, LLC	556	556	556	556	556	0
The Institute for Wealth Management, LLC	11,230	11,578	11,578	11,804	11,804	11,804
The MassMutual Trust Company, FSB	0	0	0	0	0	577
The Nalls Sherbakoff Group, LLC	207	207	207	207	207	0
The National Farmers Union Mutual Insurance Society Limited	0	0	0	0	0	0
The Royal Bank of Scotland Plc (London)	595,430	67,237	67,237	67,237	67,237	67,237
The Vanguard Group, Inc	62,234,656	63,019,001	65,999,829	64,789,079	64,045,065	64,024,788
THEAM NLE	0	0	0	0	0	0
Theodoor Gilissen Bankiers N V (Asset Management) NLE	0	0	0	0	0	0
Third Avenue Management LLC	2,443,501	2,452,518	2,452,518	2,363,130	2,366,497	2,368,003
Thomas White International, Ltd	0	0	0	0	0	0
Thornburg Investment Management, Inc	0	0	0	0	0	0
Thurgauer Kantonalbank	788	1,656	964	1,167	0	0
Tibra Equities Europe, Ltd	0	0	0	0	0	0
TIFF Advisory Services, Inc	0	0	0	0	0	0
Tiger Asset Management GmbH	11,000	11,000	3,200	6,000	6,000	6,000
TimeScale Financial, Inc	244	244	0	0	0	0
Tokio Marine Asset Management Co , Ltd	133	133	151	175	175	175
Tontine Asset Management, LLC	0	0	0	0	0	0
TOP Vermögen AG	0	0	0	0	0	0

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41 0%	51 7%	46 2%	46 6%	49 6%	45 8%	44 0%	50 7%	49 0%	43 4%	45 3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
TOP Vermögensverwaltung AG	0	0	0	0	0	0	7,000	7,000	7,000	7,000	10,000
Tower Research Capital LLC	13,177	0	0	1,261	2,403	0	1,400	4,605	17,357	447	434
TradeCom Suisse AG	14,872	14,872	14,872	14,872	0	0	0	0	0	0	0
Tradewinds Capital Management, LLC	223	223	334	334	334	334	0	0	0	0	0
Tredje AP Fonden	0	0	29,714	29,714	29,714	29,714	0	0	0	0	235,638
Tressis Gestion, S G I I C , S A	0	0	15,000	15,000	20,000	20,000	0	0	0	0	0
Trexquant Investment LP	0	0	0	40,882	0	0	52,829	0	0	16,909	87,104
Triasima Portfolio Management Inc	0	0	0	0	0	0	0	0	0	0	0
Trient Asset Management AS	4,499	4,499	4,499	4,499	0	0	0	0	0	0	0
Tudor Investment Corporation	0	0	0	0	0	0	0	0	0	13,515	0
Tuttle Capital Management, LLC	0	0	0	0	0	0	0	0	0	0	0
Two Sigma Investments, LP	157,026	12,848	175,800	1,184,463	454,123	152,848	23,546	124,186	153,202	737,234	0
Tyers Asset Management LLC	7,436	7,436	7,436	7,436	7,436	7,436	7,436	8,690	12,386	12,386	14,784
U S Bancorp Asset Management, Inc	11,523	12,089	14,124	13,644	15,765	14,336	10,722	12,680	11,596	19,474	20,405
UBS (Luxembourg) S A	0	0	0	0	0	0	0	0	0	0	0
UBS Asset Management (Americas), Inc	0	0	0	0	0	0	0	251	192	192	4,845
UBS Asset Management (Australia) Ltd	1,843	2,013	3,022	3,591	3,524	3,965	3,458	3,458	3,860	4,505	4,295
UBS Asset Management (Switzerland)	2,861,733	3,501,843	4,752,913	4,764,442	4,721,088	4,801,485	3,927,094	3,495,542	3,340,960	3,625,848	3,126,612
UBS Asset Management (UK) Ltd	1,814,539	2,627,190	3,962,118	3,880,122	3,778,267	3,764,924	3,324,873	2,861,855	2,345,184	1,263,908	3,214,104
UBS Asset Management France S A	6,000	6,000	6,000	6,000	6,000	6,000	6,000	25,000	25,000	25,000	25,000
UBS Financial Services, Inc	4,273,146	9,386,515	28,616,421	13,707,746	14,111,692	277,468	3,121,731	15,221,705	123,599	2,965,997	1,270,000
UBS Gestión, S G I I C , S A	66,977	66,977	67,297	67,297	67,297	3,060	3,060	3,060	3,060	3,060	3,060
UBS Switzerland AG	0	0	0	0	0	50,315	50,315	48,023	53,635	63,527	70,032
Unicorp Patrimonio, Sociedad de Valores, S A U	71,500	71,500	71,500	71,500	71,500	71,500	0	0	0	0	0
UniCredit Bank AG	746,800	746,800	57,800	57,800	57,800	57,800	57,800	57,800	57,800	57,800	0
Unigest, S G I I C , S A	0	0	1,500	4,000	4,000	4,000	4,000	0	0	0	0
Unio Capital LLC	0	0	0	0	193,955	0	0	0	0	0	0
Union Investment Austria GmbH	35,000	35,000	35,000	35,000	0	0	0	0	0	0	0
Union Investment Institutional GmbH	4,756,776	4,673,482	6,693,846	6,834,157	6,819,774	7,284,607	7,275,271	6,876,702	7,111,883	7,067,458	6,713,003
Union Investment Privatfonds GmbH	1,025,000	2,490,000	4,729,138	4,691,938	4,665,938	1,525,938	2,937,500	2,937,500	0	21,000	18,900
Union Street Partners LLC	0	0	0	0	0	0	0	52,000	52,000	52,000	52,000
Universal-Investment-Gesellschaft mbH	48,556	15,000	20,000	90,000	115,000	146,500	186,500	186,500	211,500	206,500	201,500
Urquijo Gestión, S A , S G I I C , Sociedad Unipersonal	16,423	16,423	16,423	15,774	15,774	15,774	15,774	15,774	15,774	15,774	15,774
Ursa Fund Management, LLC	548,400	600,750	0	0	0	0	0	0	0	0	0
USAA Asset Management Company	0	0	0	0	17,499	41,318	77,761	96,366	113,407	126,809	118,838
USS Investment Management Ltd	0	0	0	0	0	0	0	0	0	0	0
UTC Fund Services, Inc	18,494	20,566	0	0	0	0	0	0	0	0	0
Uzbs Gestion	0	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Valeo Financial Advisors LLC	0	0	0	0	0	0	522	222	0	500	0
Valiant Bank AG	6,961	10,961	10,961	10,961	10,961	10,961	0	0	0	0	0
Value Asset Management GmbH	0	0	0	0	0	15,000	20,000	20,000	20,000	25,000	118,000
VanEck Asset Management B V	147,346	192,404	197,640	205,442	212,786	275,927	300,180	323,954	351,413	131,020	187,646
Vanguard Capital	70,844	70,844	70,844	70,844	70,844	70,844	70,844	70,844	0	0	0
Vanguard Global Advisers LLC	0	0	0	0	0	0	0	1,502,352	1,561,945	1,517,185	1,537,177
Vanguard Investments Australia Ltd	731,147	492,620	714,828	836,579	838,706	883,906	812,772	1,315,201	1,508,031	1,525,262	1,516,227

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
TOP Vermögensverwaltung AG	10,000	10,000	10,000	0	0	0
Tower Research Capital LLC	3,899	79,293	27,665	2,653	0	12,735
TradeCom Suisse AG	0	0	0	0	0	0
Tradewinds Capital Management, LLC	0	0	0	0	0	0
Tredje AP Fonden	235,638	222,206	222,206	228,846	228,846	228,846
Tressis Gestion, S G I I C , S A	0	0	0	0	0	0
Trexquant Investment LP	0	0	0	30,335	0	0
Triasima Portfolio Management Inc	0	0	0	0	9,000	9,000
Trient Asset Management AS	0	0	0	0	0	0
Tudor Investment Corporation	12,773	0	31,581	37,977	17,424	15,433
Tuttle Capital Management, LLC	0	0	0	565	0	0
Two Sigma Investments, LP	113,026	500,382	4,515,423	622,392	296,292	1,203,129
Tyers Asset Management LLC	14,784	14,784	14,784	14,784	14,784	14,784
U S Bancorp Asset Management, Inc	27,224	26,482	13,583	11,404	12,392	13,281
UBS (Luxembourg) S A	0	13,973	15,742	15,742	15,742	15,742
UBS Asset Management (Americas), Inc	4,845	0	0	0	3,505	1,990
UBS Asset Management (Australia) Ltd	4,496	4,496	4,496	4,496	4,496	4,496
UBS Asset Management (Switzerland)	3,169,943	3,315,716	2,456,331	2,631,976	3,683,525	3,042,042
UBS Asset Management (UK) Ltd	3,229,489	3,172,954	2,609,012	3,410,537	3,278,348	1,327,322
UBS Asset Management France S A	25,000	25,000	25,000	25,000	25,000	25,000
UBS Financial Services, Inc	9,177,185	5,717,578	5,166,904	7,865,635	3,399,996	2,047,724
UBS Gestión, S G I I C , S A	3,060	0	0	0	0	0
UBS Switzerland AG	70,032	70,032	70,032	68,447	69,001	25,601
Unicorp Patrimonio, Sociedad de Valores, S A U	0	0	0	0	0	0
UniCredit Bank AG	0	0	0	0	0	0
Unigest, S G I I C , S A	0	0	0	0	0	0
Unio Capital LLC	0	0	0	0	0	0
Union Investment Austria GmbH	0	0	0	0	0	0
Union Investment Institutional GmbH	6,642,365	6,669,671	6,703,443	6,506,188	6,495,147	6,459,640
Union Investment Privatfonds GmbH	518,900	1,311,600	1,846,370	1,819,600	1,819,600	5,019,190
Union Street Partners LLC	52,000	52,000	52,000	52,000	0	0
Universal-Investment-Gesellschaft mbH	226,500	276,500	231,500	231,500	231,500	231,500
Urquijo Gestión, S A , S G I I C , Sociedad Unipersonal	15,774	0	0	0	0	0
Ursa Fund Management, LLC	0	0	0	0	0	0
USAA Asset Management Company	123,139	134,674	130,142	138,273	146,609	138,858
USS Investment Management Ltd	0	0	416,791	416,791	416,791	678,745
UTC Fund Services, Inc	0	0	0	0	0	0
Uz2s Gestion	20,000	20,000	20,000	0	0	0
Valeo Financial Advisors LLC	0	0	0	0	0	0
Valiant Bank AG	0	0	0	0	29,784	0
Value Asset Management GmbH	130,000	130,000	85,000	75,000	70,000	65,000
VanEck Asset Management B V	203,307	199,380	58,008	58,008	58,008	58,791
Vanguard Capital	0	0	0	0	0	0
Vanguard Global Advisers LLC	1,512,062	1,520,550	1,494,295	1,464,795	1,477,823	1,458,124
Vanguard Investments Australia Ltd	1,554,551	1,707,397	2,017,448	1,578,245	1,549,408	1,605,227

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41.0%	51.7%	46.2%	46.6%	49.6%	45.8%	44.0%	50.7%	49.0%	43.4%	45.3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Vanguard Investments Canada Inc	0	0	0	26,709	32,970	0	0	0	0	0	0
Vantage Consulting Group, Inc	0	0	0	0	0	0	0	0	0	0	0
Vantage Investment Partners, LLC	2,908,800	0	159,000	159,000	0	0	0	0	0	0	0
Veermaster Asset Management GmbH	0	0	0	0	0	0	0	0	0	14,650	14,650
Veriti Management, LLC	0	0	0	0	0	0	0	0	0	0	0
Verition Fund Management LLC	0	0	0	0	0	0	0	0	0	0	0
Vermeer Investment Management Ltd	0	0	0	0	0	0	0	0	0	0	0
Verrazano Capital, NLE	172,511	0	0	0	0	0	0	0	0	0	0
Vertiva Family Office GmbH, NLE	0	0	5,000	0	0	0	0	0	0	0	0
Venus Capital Partners, LLC	0	0	0	0	0	0	0	0	0	0	0
Vestcor Inc	44,245	44,245	44,245	44,245	48,709	48,709	48,709	48,709	52,653	52,653	52,653
Vident Investment Advisory, LLC	0	0	535	535	535	535	535	535	535	535	535
Virginia Retirement System	0	0	0	18,435	27,127	0	0	0	0	0	0
Virtu Americas LLC	59,757	34,962	72,307	48,683	135,036	107,756	11,062	0	38,233	23,813	15,161
VM Vermögens-Management GmbH	10,000	10,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Voloridge Investment Management, LLC	0	0	0	0	0	0	155,561	0	0	0	0
von der Heydt & Co, AG	0	0	0	0	0	0	0	0	0	0	6,310
Vontobel Asset Management AG	0	0	0	0	0	0	0	0	0	0	22,261
Vontobel Asset Management S.A.	0	0	0	0	0	0	0	0	0	0	0
Voya Investment Management LLC	386,477	368,204	508,988	495,676	472,173	469,631	512,760	236,767	240,522	251,506	220,906
VP Fund Solutions (Liechtenstein) AG	0	0	0	0	0	0	0	0	0	0	0
W & W Asset Management GmbH	94,235	102,612	136,753	138,994	328,292	260,442	376,480	333,582	219,436	205,551	213,143
W&P Financial Services GmbH	0	0	0	0	11,000	11,000	11,000	11,000	11,000	11,000	0
W&W Asset Management Dublin DAC	0	0	0	0	0	0	0	59,366	0	0	0
Walleye Trading, LLC	0	0	0	72,793	113,741	261,624	0	121,499	9,465	0	0
Wallrich Asset Management AG	0	0	0	0	25,000	25,000	0	0	0	0	0
Walser Privatbank AG, NLE	264,503	266,889	264,503	266,889	266,889	266,889	266,934	266,934	233,100	233,100	212,045
Warburg Invest AG	8,757	8,757	9,757	56,757	57,806	57,806	7,806	7,806	11,107	11,107	16,585
Warburg Invest Kapitalanlagegesellschaft mbH	39,000	39,000	98,500	88,600	22,426	97,527	163,949	158,949	158,949	116,749	66,422
Warren Averett Asset Management, LLC	0	0	0	0	165	0	0	0	0	0	0
WAVE Management AG	46,579	61,323	38,189	79,975	56,794	53,761	53,761	53,761	23,348	23,348	23,348
WCM Investment Management	0	0	0	0	0	0	0	0	0	0	0
We Are One Seven, LLC	0	0	0	0	464	502	502	0	202	0	0
Wealth Management Advisors, LLC	0	0	0	0	900	900	900	900	900	900	900
Wealth Quarterback LLC	0	0	0	0	0	0	0	0	0	0	0
Wealthcare Advisory Partners LLC	0	0	0	65	65	65	0	0	0	0	0
Wealthcare Capital Management, LLC	0	0	0	0	0	0	0	0	0	0	0
Wealthprivat Bank S.A.U.	61,500	61,500	68,000	68,000	68,000	37,000	37,000	37,000	44,433	37,000	37,000
Wealthspire Advisors LLC	0	0	0	0	0	0	0	0	0	0	0
Wealthspire Advisors, L.P., NLE	2,200	3,339	6,132	5,990	6,635	6,636	6,452	6,783	7,577	7,514	0
Wedbush Securities, Inc	0	0	0	0	0	0	12,500	20,400	20,000	29,269	29,295
Weld Capital Management LLC	0	0	0	0	0	0	0	0	0	0	13,896
Wellington Management Company, LLP	434,252	18,559,729	40,591,314	33,495,447	13,770,756	271,008	0	0	33,404	51,874	51,249
Wells Fargo Advisors	209,084	239,668	168,833	162,473	197,137	99,958	113,488	154,030	91,163	100,832	98,507
Wells Fargo Bank, N.A.	2,505	4,400	6,029	5,684	7,282	4,495	2,916	3,443	2,640	4,861	2,400

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44 6%	45 0%	43 2%	39 4%	38 7%	39 4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Vanguard Investments Canada Inc	0	0	0	0	0	0
Vantage Consulting Group, Inc	0	0	0	0	0	300
Vantage Investment Partners, LLC	0	0	0	0	0	0
Veermaster Asset Management GmbH	14,650	14,650	0	0	0	0
Veriti Management, LLC	0	0	0	0	0	2,920
Verition Fund Management LLC	0	0	0	0	15,003	20,142
Vermeer Investment Management Ltd	0	0	0	0	0	47,402
Verrazano Capital, NLE	0	0	0	0	0	0
Vertiva Family Office GmbH, NLE	0	0	0	0	0	0
Venus Capital Partners, LLC	0	115	0	0	0	0
Vestcor Inc	52,653	31,959	31,959	31,959	31,959	55,857
Vident Investment Advisory, LLC	535	0	374,159	295,630	0	0
Virginia Retirement System	0	0	0	81,538	0	0
Virtu Americas LLC	33,646	97,655	97,655	0	0	31,059
VM Vermögens-Management GmbH	15,000	15,000	15,000	15,000	15,000	0
Voloridge Investment Management, LLC	0	22,582	0	236,718	0	129,699
von der Heydt & Co, AG	6,310	6,310	6,310	6,310	6,310	6,310
Vontobel Asset Management AG	0	368,000	416,825	54,609	104,486	91,391
Vontobel Asset Management S.A.	0	0	3,033	0	0	0
Voya Investment Management LLC	306,452	306,540	310,566	316,028	315,718	282,123
VP Fund Solutions (Liechtenstein) AG	5,000	0	0	0	0	0
W & W Asset Management GmbH	213,143	213,143	251,143	352,143	278,664	278,664
W&P Financial Services GmbH	0	0	0	0	0	0
W&W Asset Management Dublin DAC	0	0	0	0	0	0
Walleye Trading, LLC	0	4,193	34,109	0	0	0
Wallrich Asset Management AG	0	0	0	0	0	0
Walser Privatbank AG, NLE	212,045	223,100	99,045	99,045	97,000	97,000
Warburg Invest AG	16,585	10,103	12,203	12,203	12,203	14,849
Warburg Invest Kapitalanlagegesellschaft mbH	77,222	77,222	87,222	87,222	87,222	81,222
Warren Averett Asset Management, LLC	0	0	0	0	0	0
WAVE Management AG	23,348	23,348	23,348	25,348	25,348	62,471
WCM Investment Management	0	0	0	0	0	80,398
We Are One Seven, LLC	0	0	0	0	0	0
Wealth Management Advisors, LLC	900	900	900	900	0	0
Wealth Quarterback LLC	0	608	608	0	0	0
Wealthcare Advisory Partners LLC	0	0	0	0	0	0
Wealthcare Capital Management, LLC	0	286	0	0	0	0
Wealthprivat Bank S.A.U.	37,900	37,900	37,900	37,900	37,900	37,900
Wealthspire Advisors LLC	0	726,006	526,292	519,327	519,330	0
Wealthspire Advisors, L.P., NLE	0	0	0	0	522,190	522,190
Wedbush Securities, Inc	29,795	32,295	33,395	18,416	12,529	12,629
Weld Capital Management LLC	0	0	0	0	10,117	28,612
Wellington Management Company, LLP	41,312	36,797	10,491	0	451,996	747,046
Wells Fargo Advisors	119,614	366,682	82,986	44,663	42,336	40,620
Wells Fargo Bank, N.A.	2,763	2,494	94	795	795	795

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	41.0%	51.7%	46.2%	46.6%	49.6%	45.8%	44.0%	50.7%	49.0%	43.4%	45.3%
Shares Outstanding	1,544,854,000	1,379,273,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	122,554	203,501	203,501	203,501	323,481	323,481	323,481	323,481	323,481	621,096	621,096
Shares Held by Institutions	633,984,853	712,546,060	954,466,207	963,648,420	1,024,066,318	945,425,928	908,210,481	1,046,956,290	1,013,496,819	897,685,296	935,466,185
Number of Institutions With Holdings	698	715	721	730	721	712	644	642	613	601	570

Institution/Individual	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019
Wells Fargo Securities, LLC	0	0	0	400	0	0	0	80,000	0	60,164	0
Werte Invest Family Office GmbH	5,000	0	0	0	0	0	0	0	0	0	0
Wertefinder Vermögensverwaltung NLE	0	0	5,000	10,000	5,000	15,000	20,000	20,000	30,000	20,000	20,000
Westbourne Investment Advisors, Inc	0	0	0	0	0	0	0	4,750	0	0	0
Western Asset Management Co	0	0	0	0	0	0	0	0	0	0	0
Westpac Banking Corporation	0	0	148,466	0	0	0	0	0	0	0	0
Westside Investment Management, Inc	0	486	486	486	0	0	0	0	0	0	0
Wetherby Asset Management, Inc	23,072	24,851	24,081	24,651	26,083	27,410	0	20,490	23,021	18,526	29,282
Whitener Capital Management Inc	0	0	0	0	75	75	0	75	75	75	75
Whitnell & Co	266	0	0	0	103	103	0	0	0	0	0
Whittier Trust Company	63	63	0	0	0	0	0	0	0	0	0
WHV Investment Management, Inc NLE	99,826	99,826	99,826	99,826	0	0	0	0	0	0	0
Wildermuth Advisory, LLC	0	0	0	9,000	10,600	10,600	10,600	0	0	0	0
Willard Mills Advisory, LLC NLE	0	0	4,000	4,000	4,000	4,000	0	0	0	0	0
William Blair Investment Management, LLC	0	11,626	0	0	0	0	0	0	0	0	0
Wilmington Trust Investment Advisors, Inc	16,810	16,810	16,810	16,810	16,810	16,810	16,810	0	0	0	0
Winfield Associates Inc	250	250	250	540	590	0	0	0	0	0	0
Winning Points Advisors, LLC	200	200	10,000	20,000	20,000	20,000	0	0	0	0	0
Winthrop Partners - WNY, LLC	0	0	0	0	15,000	15,000	15,000	15,000	0	0	0
Winton Capital Management Ltd	0	0	6,952	18,597	5,687	4,074	1,303	2,151	1,718	2,212	2,291
WisdomTree Asset Management, Inc	145,162	277,582	23,217	22,929	81,823	20,070	92,734	8,819	9,065	10,291	8,583
Wolverine Asset Management, LLC	73,300	0	0	0	90,997	4,558	147,732	149,122	0	0	0
Wolverine Trading, LLC	30,621	124,448	0	23,231	10,881	145,584	145,584	0	96,546	32,122	66,865
Woodman Asset Management AG	50,000	50,000	50,000	50,000	0	0	0	0	0	0	0
Woodpecker Capital SA	0	0	0	0	0	0	0	0	0	10,000	0
World Asset Management, Inc	84,703	128,691	121,728	232,508	227,746	194,704	174,555	171,409	151,535	31,253	139,510
Wright Investors' Service Inc	0	0	0	13,950	0	0	0	0	0	0	0
WSS Vermögensmanagement GmbH	1,348	1,348	1,348	0	0	0	0	0	0	0	0
Wylder Asset Management AG	0	0	0	0	0	500,000	1,000,000	1,000,000	0	0	750,000
Wyss & Partner, Vermögensverwaltung und Anlageberatung AG	0	0	1,000	1,000	2,000	2,000	0	0	0	0	0
Xact Kapitalforvaltning AB	0	135,384	222,162	409,421	409,421	378,968	410,964	421,121	421,121	421,121	421,121
Y-Intercept (Hong Kong) Ltd	0	0	0	0	0	0	0	0	0	0	0
Yorkville Asset Management, Inc	0	0	0	0	0	2,000	2,000	0	0	0	0
Yuanta Securities Investment Trust Co , Ltd	7,476	7,476	23,174	23,174	23,174	18,323	4,118	0	0	0	0
Zarifi Gestion	1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626	0	0
Zeus Capital S A	0	0	0	0	0	0	4,000	4,000	4,000	4,000	4,000
Ziel Invest GmbH	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
Zions Capital Advisors, Inc	951	569	529	1,872	1,902	1,184	777	0	2,328	2,262	350
Zürcher Kantonalbank (Asset Management)	1,783,106	1,294,785	717,301	2,351,833	1,781,565	1,834,909	1,944,539	1,777,725	1,534,798	1,439,903	1,533,583
Zurich Insurance Group	0	0	0	376,809	515,686	356,264	46,346	102,151	9,834	9,834	9,834

Exhibit 9

Deutsche Bank AG

Quarterly Institutional Holdings

Source: Refinitiv Eikon; Bloomberg

Shares Held by Institutions as a Percentage of Float	44.6%	45.0%	43.2%	39.4%	38.7%	39.4%
Shares Outstanding	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000	2,066,773,000
Shares Held by Insiders/Individuals	525,586	525,586	18,309,892	18,309,892	18,309,892	18,309,892
Shares Held by Institutions	921,882,686	929,487,836	884,876,047	807,176,011	793,777,779	807,917,392
Number of Institutions With Holdings	559	567	570	584	578	544

Institution/Individual	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020	12/31/2020
Wells Fargo Securities, LLC	0	0	129,890	0	0	0
Werte Invest Family Office GmbH	0	0	0	0	0	0
Wertefinder Vermögensverwaltung NLE	20,000	0	0	0	0	0
Westbourne Investment Advisors, Inc	0	0	0	0	0	0
Western Asset Management Co	0	0	0	1	0	0
Westpac Banking Corporation	0	0	0	0	0	0
Westside Investment Management, Inc	0	0	0	0	0	0
Wetherby Asset Management, Inc	44,269	32,028	26,767	34,885	3,194	38,402
Whitener Capital Management Inc	0	0	0	0	0	0
Whitnell & Co	0	0	0	0	0	0
Whittier Trust Company	0	0	47	47	0	0
WHV Investment Management, Inc NLE	0	0	0	0	0	0
Wildermuth Advisory, LLC	0	0	0	0	0	0
Willard Mills Advisory, LLC NLE	0	0	0	0	0	0
William Blair Investment Management, LLC	0	0	0	0	0	0
Wilmington Trust Investment Advisors, Inc	0	0	0	0	0	0
Winfield Associates Inc	0	0	0	0	0	0
Winning Points Advisors, LLC	0	0	0	0	0	0
Winthrop Partners - WNY, LLC	0	0	0	0	0	0
Winton Capital Management Ltd	2,819	2,083	1,903	2,709	926	926
WisdomTree Asset Management, Inc	0	0	0	0	0	0
Wolverine Asset Management, LLC	0	0	0	0	0	0
Wolverine Trading, LLC	89,287	99,684	69,269	85,412	86,046	45,332
Woodman Asset Management AG	0	0	0	0	0	0
Woodpecker Capital SA	0	0	0	0	0	0
World Asset Management, Inc	130,579	124,058	121,382	106,890	106,074	111,393
Wright Investors' Service Inc	0	0	0	0	0	0
WSS Vermögensmanagement GmbH	0	0	0	0	0	0
Wylder Asset Management AG	750,000	1,000,000	0	300,000	300,000	600,000
Wyss & Partner, Vermögensverwaltung und Anlageberatung AG	0	0	0	0	0	0
Xact Kapitalforvaltning AB	421,121	421,121	421,121	421,121	421,121	0
Y-Intercept (Hong Kong) Ltd	0	0	0	0	0	17,210
Yorkville Asset Management, Inc	0	0	0	0	0	0
Yuanta Securities Investment Trust Co , Ltd	0	0	0	0	0	0
Zarifi Gestion	0	0	0	0	0	0
Zeus Capital S A	4,000	0	0	1,150	0	0
Ziel Invest GmbH	9,000	9,000	9,000	0	0	0
Zions Capital Advisors, Inc	2,914	2,876	2,712	2,899	2,512	2,881
Zürcher Kantonalbank (Asset Management)	873,757	792,522	907,355	802,358	923,204	808,188
Zurich Insurance Group	9,834	9,834	9,834	9,834	9,834	9,834

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
3/14/2017	\$17.20	\$17.20	\$0.01	0.05%
3/15/2017	\$17.20	\$17.21	\$0.01	0.05%
3/16/2017	\$17.50	\$17.51	\$0.01	0.05%
3/17/2017	\$16.99	\$17.00	\$0.01	0.05%
3/20/2017	\$16.39	\$16.40	\$0.01	0.05%
3/21/2017	\$17.08	\$17.09	\$0.01	0.06%
3/22/2017	\$17.06	\$17.07	\$0.01	0.06%
3/23/2017	\$16.90	\$16.91	\$0.01	0.06%
3/24/2017	\$16.82	\$16.83	\$0.01	0.06%
3/27/2017	\$16.95	\$16.96	\$0.01	0.06%
3/28/2017	\$17.37	\$17.38	\$0.01	0.06%
3/29/2017	\$17.42	\$17.43	\$0.01	0.06%
3/30/2017	\$17.26	\$17.27	\$0.01	0.06%
3/31/2017	\$17.16	\$17.17	\$0.01	0.06%
4/3/2017	\$16.69	\$16.70	\$0.01	0.06%
4/4/2017	\$16.64	\$16.65	\$0.01	0.06%
4/5/2017	\$16.50	\$16.51	\$0.01	0.06%
4/6/2017	\$16.59	\$16.60	\$0.01	0.06%
4/7/2017	\$16.44	\$16.45	\$0.01	0.06%
4/10/2017	\$16.47	\$16.48	\$0.01	0.06%
4/11/2017	\$16.32	\$16.33	\$0.01	0.06%
4/12/2017	\$16.18	\$16.19	\$0.01	0.06%
4/13/2017	\$15.86	\$15.87	\$0.01	0.06%
4/17/2017	\$16.11	\$16.12	\$0.01	0.06%
4/18/2017	\$15.95	\$15.96	\$0.01	0.06%
4/19/2017	\$16.07	\$16.08	\$0.01	0.06%
4/20/2017	\$16.54	\$16.55	\$0.01	0.06%
4/21/2017	\$16.50	\$16.51	\$0.01	0.06%
4/24/2017	\$18.38	\$18.39	\$0.01	0.05%
4/25/2017	\$18.48	\$18.49	\$0.01	0.05%
4/26/2017	\$18.85	\$18.86	\$0.01	0.05%
4/27/2017	\$18.14	\$18.15	\$0.01	0.06%
4/28/2017	\$18.06	\$18.07	\$0.01	0.06%
5/1/2017	\$18.22	\$18.23	\$0.01	0.05%
5/2/2017	\$18.27	\$18.28	\$0.01	0.05%
5/3/2017	\$18.46	\$18.47	\$0.01	0.05%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
5/4/2017	\$18.77	\$18.78	\$0.01	0.05%
5/5/2017	\$19.34	\$19.35	\$0.01	0.05%
5/8/2017	\$19.07	\$19.08	\$0.01	0.05%
5/9/2017	\$18.85	\$18.86	\$0.01	0.05%
5/10/2017	\$19.01	\$19.02	\$0.01	0.05%
5/11/2017	\$18.80	\$18.81	\$0.01	0.05%
5/12/2017	\$18.77	\$18.78	\$0.01	0.05%
5/15/2017	\$19.04	\$19.05	\$0.01	0.05%
5/16/2017	\$19.27	\$19.28	\$0.01	0.05%
5/17/2017	\$18.64	\$18.65	\$0.01	0.05%
5/18/2017	\$18.68	\$18.69	\$0.01	0.05%
5/19/2017	\$19.04	\$19.05	\$0.01	0.05%
5/22/2017	\$19.12	\$19.13	\$0.01	0.05%
5/23/2017	\$19.24	\$19.25	\$0.01	0.05%
5/24/2017	\$18.95	\$18.96	\$0.01	0.05%
5/25/2017	\$18.85	\$18.86	\$0.01	0.05%
5/26/2017	\$18.45	\$18.46	\$0.01	0.05%
5/30/2017	\$17.96	\$17.97	\$0.01	0.06%
5/31/2017	\$17.46	\$17.47	\$0.01	0.06%
6/1/2017	\$17.64	\$17.65	\$0.01	0.06%
6/2/2017	\$17.65	\$17.66	\$0.01	0.06%
6/5/2017	\$17.50	\$17.51	\$0.01	0.06%
6/6/2017	\$17.31	\$17.32	\$0.01	0.06%
6/7/2017	\$17.46	\$17.47	\$0.01	0.06%
6/8/2017	\$17.57	\$17.58	\$0.01	0.06%
6/9/2017	\$17.67	\$17.68	\$0.01	0.06%
6/12/2017	\$17.35	\$17.36	\$0.01	0.06%
6/13/2017	\$17.46	\$17.47	\$0.01	0.06%
6/14/2017	\$17.32	\$17.33	\$0.01	0.06%
6/15/2017	\$16.78	\$16.79	\$0.01	0.06%
6/16/2017	\$16.81	\$16.82	\$0.01	0.06%
6/19/2017	\$17.20	\$17.21	\$0.01	0.06%
6/20/2017	\$16.84	\$16.85	\$0.01	0.06%
6/21/2017	\$16.89	\$16.90	\$0.01	0.06%
6/22/2017	\$16.74	\$16.75	\$0.01	0.06%
6/23/2017	\$16.64	\$16.65	\$0.01	0.06%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
6/26/2017	\$16.87	\$16.88	\$0.01	0.06%
6/27/2017	\$17.50	\$17.51	\$0.01	0.06%
6/28/2017	\$17.91	\$17.92	\$0.01	0.06%
6/29/2017	\$18.06	\$18.07	\$0.01	0.06%
6/30/2017	\$17.78	\$17.79	\$0.01	0.06%
7/3/2017	\$18.15	\$18.16	\$0.01	0.06%
7/5/2017	\$18.63	\$18.64	\$0.01	0.05%
7/6/2017	\$18.89	\$18.90	\$0.01	0.05%
7/7/2017	\$19.06	\$19.07	\$0.01	0.05%
7/10/2017	\$18.97	\$18.98	\$0.01	0.05%
7/11/2017	\$19.06	\$19.07	\$0.01	0.05%
7/12/2017	\$18.82	\$18.83	\$0.01	0.05%
7/13/2017	\$18.92	\$18.93	\$0.01	0.05%
7/14/2017	\$18.85	\$18.86	\$0.01	0.05%
7/17/2017	\$18.78	\$18.79	\$0.01	0.05%
7/18/2017	\$18.49	\$18.50	\$0.01	0.05%
7/19/2017	\$18.38	\$18.39	\$0.01	0.05%
7/20/2017	\$18.45	\$18.46	\$0.01	0.05%
7/21/2017	\$18.21	\$18.22	\$0.01	0.05%
7/24/2017	\$18.66	\$18.67	\$0.01	0.05%
7/25/2017	\$19.04	\$19.05	\$0.01	0.05%
7/26/2017	\$19.07	\$19.08	\$0.01	0.05%
7/27/2017	\$18.02	\$18.03	\$0.01	0.06%
7/28/2017	\$18.19	\$18.20	\$0.01	0.05%
7/31/2017	\$17.85	\$17.86	\$0.01	0.06%
8/1/2017	\$18.12	\$18.13	\$0.01	0.06%
8/2/2017	\$18.01	\$18.02	\$0.01	0.06%
8/3/2017	\$18.05	\$18.06	\$0.01	0.06%
8/4/2017	\$18.33	\$18.34	\$0.01	0.05%
8/7/2017	\$18.23	\$18.24	\$0.01	0.05%
8/8/2017	\$17.99	\$18.00	\$0.01	0.06%
8/9/2017	\$17.57	\$17.58	\$0.01	0.06%
8/10/2017	\$16.86	\$16.87	\$0.01	0.06%
8/11/2017	\$17.04	\$17.05	\$0.01	0.06%
8/14/2017	\$17.28	\$17.29	\$0.01	0.06%
8/15/2017	\$17.12	\$17.13	\$0.01	0.06%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
8/16/2017	\$17.03	\$17.04	\$0.01	0.06%
8/17/2017	\$16.44	\$16.45	\$0.01	0.06%
8/18/2017	\$16.51	\$16.52	\$0.01	0.06%
8/21/2017	\$16.16	\$16.17	\$0.01	0.06%
8/22/2017	\$16.29	\$16.30	\$0.01	0.06%
8/23/2017	\$16.26	\$16.27	\$0.01	0.06%
8/24/2017	\$16.27	\$16.28	\$0.01	0.06%
8/25/2017	\$16.41	\$16.42	\$0.01	0.06%
8/28/2017	\$16.39	\$16.40	\$0.01	0.06%
8/29/2017	\$16.04	\$16.05	\$0.01	0.06%
8/30/2017	\$16.01	\$16.02	\$0.01	0.06%
8/31/2017	\$15.99	\$16.00	\$0.01	0.06%
9/1/2017	\$16.05	\$16.06	\$0.01	0.06%
9/5/2017	\$15.66	\$15.67	\$0.01	0.06%
9/6/2017	\$15.99	\$16.00	\$0.01	0.06%
9/7/2017	\$15.91	\$15.92	\$0.01	0.06%
9/8/2017	\$16.00	\$16.01	\$0.01	0.06%
9/11/2017	\$16.33	\$16.34	\$0.01	0.06%
9/12/2017	\$16.97	\$16.98	\$0.01	0.06%
9/13/2017	\$16.77	\$16.78	\$0.01	0.06%
9/14/2017	\$16.67	\$16.68	\$0.01	0.06%
9/15/2017	\$16.53	\$16.54	\$0.01	0.06%
9/18/2017	\$16.55	\$16.56	\$0.01	0.06%
9/19/2017	\$16.55	\$16.56	\$0.01	0.06%
9/20/2017	\$16.37	\$16.38	\$0.01	0.06%
9/21/2017	\$16.69	\$16.70	\$0.01	0.06%
9/22/2017	\$16.63	\$16.64	\$0.01	0.06%
9/25/2017	\$16.03	\$16.04	\$0.01	0.06%
9/26/2017	\$16.01	\$16.02	\$0.01	0.06%
9/27/2017	\$16.56	\$16.57	\$0.01	0.06%
9/28/2017	\$16.98	\$16.99	\$0.01	0.06%
9/29/2017	\$17.28	\$17.29	\$0.01	0.06%
10/2/2017	\$17.09	\$17.10	\$0.01	0.06%
10/3/2017	\$17.07	\$17.08	\$0.01	0.06%
10/4/2017	\$16.78	\$16.79	\$0.01	0.06%
10/5/2017	\$17.21	\$17.22	\$0.01	0.06%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
10/6/2017	\$17.21	\$17.22	\$0.01	0.06%
10/9/2017	\$16.87	\$16.88	\$0.01	0.06%
10/10/2017	\$17.00	\$17.01	\$0.01	0.06%
10/11/2017	\$16.92	\$16.93	\$0.01	0.06%
10/12/2017	\$16.68	\$16.69	\$0.01	0.06%
10/13/2017	\$16.58	\$16.59	\$0.01	0.06%
10/16/2017	\$16.71	\$16.72	\$0.01	0.06%
10/17/2017	\$16.70	\$16.71	\$0.01	0.06%
10/18/2017	\$16.89	\$16.90	\$0.01	0.06%
10/19/2017	\$16.86	\$16.87	\$0.01	0.06%
10/20/2017	\$16.98	\$16.99	\$0.01	0.06%
10/23/2017	\$16.62	\$16.63	\$0.01	0.06%
10/24/2017	\$17.18	\$17.19	\$0.01	0.06%
10/25/2017	\$17.12	\$17.13	\$0.01	0.06%
10/26/2017	\$16.71	\$16.72	\$0.01	0.06%
10/27/2017	\$16.31	\$16.32	\$0.01	0.06%
10/30/2017	\$16.25	\$16.26	\$0.01	0.06%
10/31/2017	\$16.26	\$16.27	\$0.01	0.06%
11/1/2017	\$16.56	\$16.57	\$0.01	0.06%
11/2/2017	\$17.06	\$17.07	\$0.01	0.06%
11/3/2017	\$16.82	\$16.83	\$0.01	0.06%
11/6/2017	\$16.83	\$16.84	\$0.01	0.06%
11/7/2017	\$16.68	\$16.69	\$0.01	0.06%
11/8/2017	\$17.04	\$17.05	\$0.01	0.06%
11/9/2017	\$17.41	\$17.42	\$0.01	0.06%
11/10/2017	\$17.94	\$17.95	\$0.01	0.06%
11/13/2017	\$17.94	\$17.95	\$0.01	0.06%
11/14/2017	\$18.19	\$18.20	\$0.01	0.05%
11/15/2017	\$18.49	\$18.50	\$0.01	0.05%
11/16/2017	\$19.03	\$19.04	\$0.01	0.05%
11/17/2017	\$19.13	\$19.14	\$0.01	0.05%
11/20/2017	\$19.16	\$19.17	\$0.01	0.05%
11/21/2017	\$19.01	\$19.02	\$0.01	0.05%
11/22/2017	\$18.90	\$18.91	\$0.01	0.05%
11/24/2017	\$19.18	\$19.19	\$0.01	0.05%
11/27/2017	\$18.73	\$18.74	\$0.01	0.05%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
11/28/2017	\$18.88	\$18.89	\$0.01	0.05%
11/29/2017	\$18.99	\$19.00	\$0.01	0.05%
11/30/2017	\$18.85	\$18.86	\$0.01	0.05%
12/1/2017	\$18.97	\$18.98	\$0.01	0.05%
12/4/2017	\$19.11	\$19.12	\$0.01	0.05%
12/5/2017	\$18.75	\$18.76	\$0.01	0.05%
12/6/2017	\$18.49	\$18.50	\$0.01	0.05%
12/7/2017	\$18.83	\$18.84	\$0.01	0.05%
12/8/2017	\$19.38	\$19.39	\$0.01	0.05%
12/11/2017	\$19.30	\$19.31	\$0.01	0.05%
12/12/2017	\$19.38	\$19.39	\$0.01	0.05%
12/13/2017	\$19.32	\$19.33	\$0.01	0.05%
12/14/2017	\$19.22	\$19.23	\$0.01	0.05%
12/15/2017	\$19.42	\$19.43	\$0.01	0.05%
12/18/2017	\$20.10	\$20.11	\$0.01	0.05%
12/19/2017	\$19.84	\$19.85	\$0.01	0.05%
12/20/2017	\$19.71	\$19.72	\$0.01	0.05%
12/21/2017	\$19.69	\$19.70	\$0.01	0.05%
12/22/2017	\$19.37	\$19.38	\$0.01	0.05%
12/26/2017	\$19.23	\$19.24	\$0.01	0.05%
12/27/2017	\$19.04	\$19.05	\$0.01	0.05%
12/28/2017	\$19.10	\$19.11	\$0.01	0.05%
12/29/2017	\$19.02	\$19.03	\$0.01	0.05%
1/2/2018	\$19.32	\$19.33	\$0.01	0.05%
1/3/2018	\$19.16	\$19.17	\$0.01	0.05%
1/4/2018	\$19.76	\$19.77	\$0.01	0.05%
1/5/2018	\$18.55	\$18.56	\$0.01	0.05%
1/8/2018	\$18.29	\$18.30	\$0.01	0.05%
1/9/2018	\$18.12	\$18.13	\$0.01	0.06%
1/10/2018	\$18.50	\$18.51	\$0.01	0.05%
1/11/2018	\$18.54	\$18.55	\$0.01	0.05%
1/12/2018	\$18.69	\$18.70	\$0.01	0.05%
1/16/2018	\$18.51	\$18.52	\$0.01	0.05%
1/17/2018	\$18.52	\$18.53	\$0.01	0.05%
1/18/2018	\$18.53	\$18.54	\$0.01	0.05%
1/19/2018	\$18.77	\$18.78	\$0.01	0.05%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
1/22/2018	\$19.39	\$19.40	\$0.01	0.05%
1/23/2018	\$19.47	\$19.48	\$0.01	0.05%
1/24/2018	\$19.74	\$19.75	\$0.01	0.05%
1/25/2018	\$19.63	\$19.64	\$0.01	0.05%
1/26/2018	\$19.51	\$19.52	\$0.01	0.05%
1/29/2018	\$19.10	\$19.11	\$0.01	0.05%
1/30/2018	\$18.38	\$18.39	\$0.01	0.05%
1/31/2018	\$18.33	\$18.34	\$0.01	0.05%
2/1/2018	\$18.61	\$18.63	\$0.02	0.11%
2/2/2018	\$17.08	\$17.09	\$0.01	0.06%
2/5/2018	\$16.38	\$16.39	\$0.01	0.06%
2/6/2018	\$16.51	\$16.52	\$0.01	0.06%
2/7/2018	\$16.08	\$16.09	\$0.01	0.06%
2/8/2018	\$15.48	\$15.49	\$0.01	0.06%
2/9/2018	\$15.57	\$15.58	\$0.01	0.06%
2/12/2018	\$16.01	\$16.02	\$0.01	0.06%
2/13/2018	\$15.89	\$15.90	\$0.01	0.06%
2/14/2018	\$16.25	\$16.26	\$0.01	0.06%
2/15/2018	\$16.11	\$16.12	\$0.01	0.06%
2/16/2018	\$16.07	\$16.08	\$0.01	0.06%
2/20/2018	\$16.45	\$16.46	\$0.01	0.06%
2/21/2018	\$16.56	\$16.57	\$0.01	0.06%
2/22/2018	\$16.43	\$16.44	\$0.01	0.06%
2/23/2018	\$16.42	\$16.43	\$0.01	0.06%
2/26/2018	\$16.48	\$16.49	\$0.01	0.06%
2/27/2018	\$16.39	\$16.40	\$0.01	0.06%
2/28/2018	\$15.93	\$15.94	\$0.01	0.06%
3/1/2018	\$15.69	\$15.70	\$0.01	0.06%
3/2/2018	\$15.79	\$15.80	\$0.01	0.06%
3/5/2018	\$15.89	\$15.90	\$0.01	0.06%
3/6/2018	\$16.05	\$16.06	\$0.01	0.06%
3/7/2018	\$16.33	\$16.34	\$0.01	0.06%
3/8/2018	\$16.11	\$16.12	\$0.01	0.06%
3/9/2018	\$16.11	\$16.12	\$0.01	0.06%
3/12/2018	\$16.11	\$16.12	\$0.01	0.06%
3/13/2018	\$15.78	\$15.79	\$0.01	0.06%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
3/14/2018	\$15.70	\$15.71	\$0.01	0.06%
3/15/2018	\$15.70	\$15.71	\$0.01	0.06%
3/16/2018	\$15.81	\$15.82	\$0.01	0.06%
3/19/2018	\$15.54	\$15.55	\$0.01	0.06%
3/20/2018	\$15.51	\$15.52	\$0.01	0.06%
3/21/2018	\$14.78	\$14.79	\$0.01	0.07%
3/22/2018	\$14.18	\$14.19	\$0.01	0.07%
3/23/2018	\$13.74	\$13.75	\$0.01	0.07%
3/26/2018	\$14.07	\$14.08	\$0.01	0.07%
3/27/2018	\$13.77	\$13.78	\$0.01	0.07%
3/28/2018	\$13.75	\$13.76	\$0.01	0.07%
3/29/2018	\$13.97	\$13.98	\$0.01	0.07%
4/2/2018	\$13.68	\$13.69	\$0.01	0.07%
4/3/2018	\$13.71	\$13.72	\$0.01	0.07%
4/4/2018	\$13.88	\$13.89	\$0.01	0.07%
4/5/2018	\$14.32	\$14.33	\$0.01	0.07%
4/6/2018	\$13.87	\$13.88	\$0.01	0.07%
4/9/2018	\$14.00	\$14.01	\$0.01	0.07%
4/10/2018	\$14.07	\$14.08	\$0.01	0.07%
4/11/2018	\$14.18	\$14.19	\$0.01	0.07%
4/12/2018	\$14.40	\$14.41	\$0.01	0.07%
4/13/2018	\$14.38	\$14.39	\$0.01	0.07%
4/16/2018	\$14.33	\$14.34	\$0.01	0.07%
4/17/2018	\$14.37	\$14.38	\$0.01	0.07%
4/18/2018	\$14.44	\$14.45	\$0.01	0.07%
4/19/2018	\$14.45	\$14.46	\$0.01	0.07%
4/20/2018	\$14.25	\$14.26	\$0.01	0.07%
4/23/2018	\$14.25	\$14.26	\$0.01	0.07%
4/24/2018	\$14.76	\$14.77	\$0.01	0.07%
4/25/2018	\$14.60	\$14.61	\$0.01	0.07%
4/26/2018	\$14.34	\$14.35	\$0.01	0.07%
4/27/2018	\$13.88	\$13.89	\$0.01	0.07%
4/30/2018	\$13.66	\$13.67	\$0.01	0.07%
5/1/2018	\$13.59	\$13.60	\$0.01	0.07%
5/2/2018	\$13.61	\$13.62	\$0.01	0.07%
5/3/2018	\$13.62	\$13.63	\$0.01	0.07%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
5/4/2018	\$13.77	\$13.78	\$0.01	0.07%
5/7/2018	\$13.78	\$13.79	\$0.01	0.07%
5/8/2018	\$13.59	\$13.60	\$0.01	0.07%
5/9/2018	\$13.77	\$13.78	\$0.01	0.07%
5/10/2018	\$13.88	\$13.89	\$0.01	0.07%
5/11/2018	\$13.86	\$13.87	\$0.01	0.07%
5/14/2018	\$13.65	\$13.66	\$0.01	0.07%
5/15/2018	\$13.29	\$13.30	\$0.01	0.08%
5/16/2018	\$12.99	\$13.00	\$0.01	0.08%
5/17/2018	\$12.99	\$13.00	\$0.01	0.08%
5/18/2018	\$12.72	\$12.73	\$0.01	0.08%
5/21/2018	\$12.71	\$12.72	\$0.01	0.08%
5/22/2018	\$12.95	\$12.96	\$0.01	0.08%
5/23/2018	\$12.89	\$12.90	\$0.01	0.08%
5/24/2018	\$12.25	\$12.26	\$0.01	0.08%
5/25/2018	\$12.06	\$12.07	\$0.01	0.08%
5/29/2018	\$11.29	\$11.30	\$0.01	0.09%
5/30/2018	\$11.57	\$11.58	\$0.01	0.09%
5/31/2018	\$11.07	\$11.08	\$0.01	0.09%
6/1/2018	\$11.03	\$11.04	\$0.01	0.09%
6/4/2018	\$11.20	\$11.21	\$0.01	0.09%
6/5/2018	\$11.02	\$11.03	\$0.01	0.09%
6/6/2018	\$11.34	\$11.35	\$0.01	0.09%
6/7/2018	\$11.51	\$11.52	\$0.01	0.09%
6/8/2018	\$11.26	\$11.27	\$0.01	0.09%
6/11/2018	\$11.43	\$11.44	\$0.01	0.09%
6/12/2018	\$11.40	\$11.41	\$0.01	0.09%
6/13/2018	\$11.37	\$11.38	\$0.01	0.09%
6/14/2018	\$11.21	\$11.22	\$0.01	0.09%
6/15/2018	\$11.10	\$11.11	\$0.01	0.09%
6/18/2018	\$11.07	\$11.08	\$0.01	0.09%
6/19/2018	\$11.16	\$11.17	\$0.01	0.09%
6/20/2018	\$11.08	\$11.09	\$0.01	0.09%
6/21/2018	\$10.89	\$10.90	\$0.01	0.09%
6/22/2018	\$11.00	\$11.01	\$0.01	0.09%
6/25/2018	\$10.88	\$10.89	\$0.01	0.09%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
6/26/2018	\$10.79	\$10.80	\$0.01	0.09%
6/27/2018	\$10.37	\$10.38	\$0.01	0.10%
6/28/2018	\$10.46	\$10.47	\$0.01	0.10%
6/29/2018	\$10.62	\$10.63	\$0.01	0.09%
7/2/2018	\$10.63	\$10.64	\$0.01	0.09%
7/3/2018	\$10.71	\$10.72	\$0.01	0.09%
7/5/2018	\$11.13	\$11.14	\$0.01	0.09%
7/6/2018	\$11.46	\$11.47	\$0.01	0.09%
7/9/2018	\$11.53	\$11.54	\$0.01	0.09%
7/10/2018	\$11.42	\$11.43	\$0.01	0.09%
7/11/2018	\$11.15	\$11.16	\$0.01	0.09%
7/12/2018	\$11.20	\$11.21	\$0.01	0.09%
7/13/2018	\$11.24	\$11.25	\$0.01	0.09%
7/16/2018	\$12.14	\$12.15	\$0.01	0.08%
7/17/2018	\$11.86	\$11.87	\$0.01	0.08%
7/18/2018	\$12.08	\$12.09	\$0.01	0.08%
7/19/2018	\$12.01	\$12.02	\$0.01	0.08%
7/20/2018	\$12.03	\$12.04	\$0.01	0.08%
7/23/2018	\$12.17	\$12.18	\$0.01	0.08%
7/24/2018	\$12.28	\$12.29	\$0.01	0.08%
7/25/2018	\$12.16	\$12.17	\$0.01	0.08%
7/26/2018	\$12.19	\$12.20	\$0.01	0.08%
7/27/2018	\$12.42	\$12.43	\$0.01	0.08%
7/30/2018	\$12.79	\$12.80	\$0.01	0.08%
7/31/2018	\$13.06	\$13.07	\$0.01	0.08%
8/1/2018	\$12.93	\$12.94	\$0.01	0.08%
8/2/2018	\$12.53	\$12.54	\$0.01	0.08%
8/3/2018	\$12.50	\$12.51	\$0.01	0.08%
8/6/2018	\$12.52	\$12.53	\$0.01	0.08%
8/7/2018	\$12.61	\$12.62	\$0.01	0.08%
8/8/2018	\$12.51	\$12.52	\$0.01	0.08%
8/9/2018	\$12.40	\$12.41	\$0.01	0.08%
8/10/2018	\$11.81	\$11.82	\$0.01	0.08%
8/13/2018	\$11.44	\$11.45	\$0.01	0.09%
8/14/2018	\$11.48	\$11.49	\$0.01	0.09%
8/15/2018	\$11.18	\$11.19	\$0.01	0.09%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
8/16/2018	\$11.20	\$11.21	\$0.01	0.09%
8/17/2018	\$11.20	\$11.21	\$0.01	0.09%
8/20/2018	\$11.21	\$11.22	\$0.01	0.09%
8/21/2018	\$11.54	\$11.55	\$0.01	0.09%
8/22/2018	\$11.60	\$11.61	\$0.01	0.09%
8/23/2018	\$11.30	\$11.31	\$0.01	0.09%
8/24/2018	\$11.39	\$11.40	\$0.01	0.09%
8/27/2018	\$11.73	\$11.74	\$0.01	0.09%
8/28/2018	\$11.55	\$11.56	\$0.01	0.09%
8/29/2018	\$11.66	\$11.67	\$0.01	0.09%
8/30/2018	\$11.41	\$11.42	\$0.01	0.09%
8/31/2018	\$11.26	\$11.27	\$0.01	0.09%
9/4/2018	\$11.42	\$11.43	\$0.01	0.09%
9/5/2018	\$11.46	\$11.47	\$0.01	0.09%
9/6/2018	\$11.37	\$11.38	\$0.01	0.09%
9/7/2018	\$11.13	\$11.14	\$0.01	0.09%
9/10/2018	\$11.10	\$11.11	\$0.01	0.09%
9/11/2018	\$11.23	\$11.24	\$0.01	0.09%
9/12/2018	\$11.23	\$11.24	\$0.01	0.09%
9/13/2018	\$11.35	\$11.36	\$0.01	0.09%
9/14/2018	\$11.40	\$11.41	\$0.01	0.09%
9/17/2018	\$11.50	\$11.51	\$0.01	0.09%
9/18/2018	\$11.58	\$11.59	\$0.01	0.09%
9/19/2018	\$11.95	\$11.96	\$0.01	0.08%
9/20/2018	\$12.25	\$12.26	\$0.01	0.08%
9/21/2018	\$12.34	\$12.35	\$0.01	0.08%
9/24/2018	\$12.24	\$12.25	\$0.01	0.08%
9/25/2018	\$12.15	\$12.16	\$0.01	0.08%
9/26/2018	\$11.90	\$11.91	\$0.01	0.08%
9/27/2018	\$11.80	\$11.81	\$0.01	0.08%
9/28/2018	\$11.35	\$11.36	\$0.01	0.09%
10/1/2018	\$11.24	\$11.25	\$0.01	0.09%
10/2/2018	\$11.12	\$11.13	\$0.01	0.09%
10/3/2018	\$11.32	\$11.33	\$0.01	0.09%
10/4/2018	\$11.19	\$11.20	\$0.01	0.09%
10/5/2018	\$11.12	\$11.13	\$0.01	0.09%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
10/8/2018	\$11.04	\$11.05	\$0.01	0.09%
10/9/2018	\$11.02	\$11.03	\$0.01	0.09%
10/10/2018	\$10.91	\$10.92	\$0.01	0.09%
10/11/2018	\$10.84	\$10.85	\$0.01	0.09%
10/12/2018	\$10.83	\$10.84	\$0.01	0.09%
10/15/2018	\$11.03	\$11.04	\$0.01	0.09%
10/16/2018	\$11.16	\$11.17	\$0.01	0.09%
10/17/2018	\$11.25	\$11.26	\$0.01	0.09%
10/18/2018	\$10.96	\$10.97	\$0.01	0.09%
10/19/2018	\$10.92	\$10.93	\$0.01	0.09%
10/22/2018	\$10.71	\$10.72	\$0.01	0.09%
10/23/2018	\$10.69	\$10.70	\$0.01	0.09%
10/24/2018	\$10.00	\$10.01	\$0.01	0.10%
10/25/2018	\$9.99	\$10.00	\$0.01	0.10%
10/26/2018	\$9.66	\$9.67	\$0.01	0.10%
10/29/2018	\$9.63	\$9.64	\$0.01	0.10%
10/30/2018	\$9.74	\$9.75	\$0.01	0.10%
10/31/2018	\$9.78	\$9.79	\$0.01	0.10%
11/1/2018	\$10.25	\$10.26	\$0.01	0.10%
11/2/2018	\$10.52	\$10.53	\$0.01	0.10%
11/5/2018	\$10.45	\$10.46	\$0.01	0.10%
11/6/2018	\$10.44	\$10.45	\$0.01	0.10%
11/7/2018	\$10.61	\$10.62	\$0.01	0.09%
11/8/2018	\$10.33	\$10.34	\$0.01	0.10%
11/9/2018	\$10.11	\$10.12	\$0.01	0.10%
11/12/2018	\$9.72	\$9.73	\$0.01	0.10%
11/13/2018	\$9.86	\$9.87	\$0.01	0.10%
11/14/2018	\$9.86	\$9.87	\$0.01	0.10%
11/15/2018	\$9.89	\$9.90	\$0.01	0.10%
11/16/2018	\$9.81	\$9.82	\$0.01	0.10%
11/19/2018	\$9.77	\$9.78	\$0.01	0.10%
11/20/2018	\$9.22	\$9.23	\$0.01	0.11%
11/21/2018	\$9.43	\$9.44	\$0.01	0.11%
11/23/2018	\$9.25	\$9.26	\$0.01	0.11%
11/26/2018	\$9.73	\$9.74	\$0.01	0.10%
11/27/2018	\$9.83	\$9.84	\$0.01	0.10%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
11/28/2018	\$9.88	\$9.89	\$0.01	0.10%
11/29/2018	\$9.41	\$9.42	\$0.01	0.11%
11/30/2018	\$9.16	\$9.17	\$0.01	0.11%
12/3/2018	\$9.39	\$9.40	\$0.01	0.11%
12/4/2018	\$9.05	\$9.06	\$0.01	0.11%
12/6/2018	\$8.89	\$8.90	\$0.01	0.11%
12/7/2018	\$8.73	\$8.74	\$0.01	0.11%
12/10/2018	\$8.37	\$8.38	\$0.01	0.12%
12/11/2018	\$8.33	\$8.34	\$0.01	0.12%
12/12/2018	\$9.03	\$9.04	\$0.01	0.11%
12/13/2018	\$8.87	\$8.88	\$0.01	0.11%
12/14/2018	\$8.79	\$8.80	\$0.01	0.11%
12/17/2018	\$8.59	\$8.60	\$0.01	0.12%
12/18/2018	\$8.68	\$8.70	\$0.02	0.23%
12/19/2018	\$8.36	\$8.37	\$0.01	0.12%
12/20/2018	\$8.05	\$8.06	\$0.01	0.12%
12/21/2018	\$7.86	\$7.87	\$0.01	0.13%
12/24/2018	\$7.90	\$7.91	\$0.01	0.13%
12/26/2018	\$8.16	\$8.17	\$0.01	0.12%
12/27/2018	\$7.81	\$7.82	\$0.01	0.13%
12/28/2018	\$8.04	\$8.05	\$0.01	0.12%
12/31/2018	\$8.15	\$8.16	\$0.01	0.12%
1/2/2019	\$8.19	\$8.20	\$0.01	0.12%
1/3/2019	\$8.08	\$8.09	\$0.01	0.12%
1/4/2019	\$8.52	\$8.53	\$0.01	0.12%
1/7/2019	\$8.69	\$8.70	\$0.01	0.12%
1/8/2019	\$8.74	\$8.75	\$0.01	0.11%
1/9/2019	\$8.56	\$8.57	\$0.01	0.12%
1/10/2019	\$8.61	\$8.62	\$0.01	0.12%
1/11/2019	\$8.55	\$8.56	\$0.01	0.12%
1/14/2019	\$8.57	\$8.58	\$0.01	0.12%
1/15/2019	\$8.62	\$8.63	\$0.01	0.12%
1/16/2019	\$9.30	\$9.31	\$0.01	0.11%
1/17/2019	\$8.91	\$8.92	\$0.01	0.11%
1/18/2019	\$9.13	\$9.14	\$0.01	0.11%
1/22/2019	\$8.84	\$8.85	\$0.01	0.11%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
1/23/2019	\$9.04	\$9.05	\$0.01	0.11%
1/24/2019	\$8.85	\$8.86	\$0.01	0.11%
1/25/2019	\$9.24	\$9.25	\$0.01	0.11%
1/28/2019	\$9.26	\$9.27	\$0.01	0.11%
1/29/2019	\$9.23	\$9.24	\$0.01	0.11%
1/30/2019	\$9.28	\$9.29	\$0.01	0.11%
1/31/2019	\$8.87	\$8.88	\$0.01	0.11%
2/1/2019	\$8.84	\$8.85	\$0.01	0.11%
2/4/2019	\$8.79	\$8.80	\$0.01	0.11%
2/5/2019	\$8.89	\$8.90	\$0.01	0.11%
2/6/2019	\$8.95	\$8.96	\$0.01	0.11%
2/7/2019	\$8.36	\$8.38	\$0.02	0.24%
2/8/2019	\$8.19	\$8.20	\$0.01	0.12%
2/11/2019	\$8.32	\$8.33	\$0.01	0.12%
2/12/2019	\$8.53	\$8.54	\$0.01	0.12%
2/13/2019	\$8.53	\$8.54	\$0.01	0.12%
2/14/2019	\$8.33	\$8.34	\$0.01	0.12%
2/15/2019	\$8.79	\$8.80	\$0.01	0.11%
2/19/2019	\$8.60	\$8.61	\$0.01	0.12%
2/20/2019	\$8.73	\$8.74	\$0.01	0.11%
2/21/2019	\$8.65	\$8.66	\$0.01	0.12%
2/22/2019	\$8.64	\$8.65	\$0.01	0.12%
2/25/2019	\$8.76	\$8.77	\$0.01	0.11%
2/26/2019	\$8.91	\$8.92	\$0.01	0.11%
2/27/2019	\$9.10	\$9.11	\$0.01	0.11%
2/28/2019	\$9.24	\$9.25	\$0.01	0.11%
3/1/2019	\$9.28	\$9.29	\$0.01	0.11%
3/4/2019	\$9.19	\$9.20	\$0.01	0.11%
3/5/2019	\$9.15	\$9.16	\$0.01	0.11%
3/6/2019	\$9.17	\$9.18	\$0.01	0.11%
3/7/2019	\$8.66	\$8.67	\$0.01	0.12%
3/8/2019	\$8.64	\$8.65	\$0.01	0.12%
3/11/2019	\$9.10	\$9.11	\$0.01	0.11%
3/12/2019	\$8.84	\$8.85	\$0.01	0.11%
3/13/2019	\$9.05	\$9.06	\$0.01	0.11%
3/14/2019	\$8.90	\$8.91	\$0.01	0.11%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
3/15/2019	\$8.87	\$8.88	\$0.01	0.11%
3/18/2019	\$9.25	\$9.26	\$0.01	0.11%
3/19/2019	\$9.03	\$9.04	\$0.01	0.11%
3/20/2019	\$8.77	\$8.78	\$0.01	0.11%
3/21/2019	\$8.43	\$8.44	\$0.01	0.12%
3/22/2019	\$8.21	\$8.22	\$0.01	0.12%
3/25/2019	\$8.16	\$8.17	\$0.01	0.12%
3/26/2019	\$8.27	\$8.28	\$0.01	0.12%
3/27/2019	\$8.46	\$8.47	\$0.01	0.12%
3/28/2019	\$8.17	\$8.18	\$0.01	0.12%
3/29/2019	\$8.12	\$8.13	\$0.01	0.12%
4/1/2019	\$8.54	\$8.55	\$0.01	0.12%
4/2/2019	\$8.50	\$8.51	\$0.01	0.12%
4/3/2019	\$8.58	\$8.59	\$0.01	0.12%
4/4/2019	\$8.50	\$8.51	\$0.01	0.12%
4/5/2019	\$8.35	\$8.36	\$0.01	0.12%
4/8/2019	\$8.31	\$8.32	\$0.01	0.12%
4/9/2019	\$8.23	\$8.24	\$0.01	0.12%
4/10/2019	\$8.20	\$8.21	\$0.01	0.12%
4/11/2019	\$8.39	\$8.40	\$0.01	0.12%
4/12/2019	\$8.60	\$8.61	\$0.01	0.12%
4/15/2019	\$8.63	\$8.64	\$0.01	0.12%
4/16/2019	\$8.85	\$8.86	\$0.01	0.11%
4/17/2019	\$8.92	\$8.93	\$0.01	0.11%
4/18/2019	\$8.76	\$8.77	\$0.01	0.11%
4/22/2019	\$8.75	\$8.76	\$0.01	0.11%
4/23/2019	\$8.53	\$8.54	\$0.01	0.12%
4/24/2019	\$8.50	\$8.51	\$0.01	0.12%
4/25/2019	\$8.35	\$8.36	\$0.01	0.12%
4/26/2019	\$8.19	\$8.20	\$0.01	0.12%
4/29/2019	\$8.31	\$8.32	\$0.01	0.12%
4/30/2019	\$8.27	\$8.28	\$0.01	0.12%
5/1/2019	\$8.15	\$8.16	\$0.01	0.12%
5/2/2019	\$8.23	\$8.23	\$0.00	0.00%
5/3/2019	\$8.21	\$8.22	\$0.01	0.12%
5/6/2019	\$8.10	\$8.11	\$0.01	0.12%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
5/7/2019	\$7.82	\$7.83	\$0.01	0.13%
5/8/2019	\$7.86	\$7.87	\$0.01	0.13%
5/9/2019	\$7.77	\$7.78	\$0.01	0.13%
5/10/2019	\$7.87	\$7.88	\$0.01	0.13%
5/13/2019	\$7.63	\$7.64	\$0.01	0.13%
5/14/2019	\$7.67	\$7.68	\$0.01	0.13%
5/15/2019	\$7.67	\$7.68	\$0.01	0.13%
5/16/2019	\$7.65	\$7.66	\$0.01	0.13%
5/17/2019	\$7.58	\$7.59	\$0.01	0.13%
5/20/2019	\$7.42	\$7.43	\$0.01	0.13%
5/21/2019	\$7.52	\$7.53	\$0.01	0.13%
5/22/2019	\$7.34	\$7.35	\$0.01	0.14%
5/23/2019	\$7.22	\$7.23	\$0.01	0.14%
5/24/2019	\$7.18	\$7.19	\$0.01	0.14%
5/28/2019	\$7.01	\$7.02	\$0.01	0.14%
5/29/2019	\$6.91	\$6.92	\$0.01	0.14%
5/30/2019	\$6.90	\$6.91	\$0.01	0.14%
5/31/2019	\$6.76	\$6.77	\$0.01	0.15%
6/3/2019	\$6.73	\$6.74	\$0.01	0.15%
6/4/2019	\$7.06	\$7.07	\$0.01	0.14%
6/5/2019	\$6.91	\$6.92	\$0.01	0.14%
6/6/2019	\$6.74	\$6.75	\$0.01	0.15%
6/7/2019	\$6.76	\$6.77	\$0.01	0.15%
6/10/2019	\$6.88	\$6.89	\$0.01	0.15%
6/11/2019	\$6.98	\$6.99	\$0.01	0.14%
6/12/2019	\$6.88	\$6.89	\$0.01	0.15%
6/13/2019	\$6.86	\$6.87	\$0.01	0.15%
6/14/2019	\$6.79	\$6.80	\$0.01	0.15%
6/17/2019	\$6.81	\$6.82	\$0.01	0.15%
6/18/2019	\$7.07	\$7.08	\$0.01	0.14%
6/19/2019	\$7.17	\$7.18	\$0.01	0.14%
6/20/2019	\$7.16	\$7.17	\$0.01	0.14%
6/21/2019	\$7.18	\$7.19	\$0.01	0.14%
6/24/2019	\$7.10	\$7.11	\$0.01	0.14%
6/25/2019	\$7.12	\$7.13	\$0.01	0.14%
6/26/2019	\$7.37	\$7.38	\$0.01	0.14%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
6/27/2019	\$7.54	\$7.55	\$0.01	0.13%
6/28/2019	\$7.62	\$7.63	\$0.01	0.13%
7/1/2019	\$7.64	\$7.65	\$0.01	0.13%
7/2/2019	\$7.59	\$7.60	\$0.01	0.13%
7/3/2019	\$7.80	\$7.81	\$0.01	0.13%
7/5/2019	\$8.02	\$8.03	\$0.01	0.12%
7/8/2019	\$7.54	\$7.55	\$0.01	0.13%
7/9/2019	\$7.28	\$7.29	\$0.01	0.14%
7/10/2019	\$7.39	\$7.40	\$0.01	0.14%
7/11/2019	\$7.47	\$7.48	\$0.01	0.13%
7/12/2019	\$7.66	\$7.67	\$0.01	0.13%
7/15/2019	\$7.77	\$7.78	\$0.01	0.13%
7/16/2019	\$7.97	\$7.98	\$0.01	0.13%
7/17/2019	\$7.88	\$7.89	\$0.01	0.13%
7/18/2019	\$7.93	\$7.94	\$0.01	0.13%
7/19/2019	\$7.72	\$7.73	\$0.01	0.13%
7/22/2019	\$7.79	\$7.80	\$0.01	0.13%
7/23/2019	\$7.95	\$7.96	\$0.01	0.13%
7/24/2019	\$7.90	\$7.91	\$0.01	0.13%
7/25/2019	\$7.89	\$7.90	\$0.01	0.13%
7/26/2019	\$7.93	\$7.94	\$0.01	0.13%
7/29/2019	\$7.83	\$7.84	\$0.01	0.13%
7/30/2019	\$7.74	\$7.75	\$0.01	0.13%
7/31/2019	\$7.81	\$7.82	\$0.01	0.13%
8/1/2019	\$7.60	\$7.61	\$0.01	0.13%
8/2/2019	\$7.88	\$7.89	\$0.01	0.13%
8/5/2019	\$7.65	\$7.66	\$0.01	0.13%
8/6/2019	\$7.63	\$7.64	\$0.01	0.13%
8/7/2019	\$7.46	\$7.47	\$0.01	0.13%
8/8/2019	\$7.66	\$7.67	\$0.01	0.13%
8/9/2019	\$7.53	\$7.54	\$0.01	0.13%
8/12/2019	\$6.94	\$6.95	\$0.01	0.14%
8/13/2019	\$7.20	\$7.21	\$0.01	0.14%
8/14/2019	\$6.70	\$6.71	\$0.01	0.15%
8/15/2019	\$6.44	\$6.45	\$0.01	0.16%
8/16/2019	\$6.94	\$6.95	\$0.01	0.14%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
8/19/2019	\$7.05	\$7.06	\$0.01	0.14%
8/20/2019	\$6.98	\$6.99	\$0.01	0.14%
8/21/2019	\$7.01	\$7.02	\$0.01	0.14%
8/22/2019	\$7.17	\$7.18	\$0.01	0.14%
8/23/2019	\$6.97	\$6.98	\$0.01	0.14%
8/26/2019	\$7.07	\$7.08	\$0.01	0.14%
8/27/2019	\$7.13	\$7.14	\$0.01	0.14%
8/28/2019	\$7.15	\$7.16	\$0.01	0.14%
8/29/2019	\$7.22	\$7.23	\$0.01	0.14%
8/30/2019	\$7.25	\$7.26	\$0.01	0.14%
9/3/2019	\$7.30	\$7.31	\$0.01	0.14%
9/4/2019	\$7.47	\$7.48	\$0.01	0.13%
9/5/2019	\$7.81	\$7.82	\$0.01	0.13%
9/6/2019	\$7.84	\$7.85	\$0.01	0.13%
9/9/2019	\$8.13	\$8.14	\$0.01	0.12%
9/10/2019	\$8.29	\$8.30	\$0.01	0.12%
9/11/2019	\$8.28	\$8.29	\$0.01	0.12%
9/12/2019	\$8.32	\$8.33	\$0.01	0.12%
9/13/2019	\$8.44	\$8.45	\$0.01	0.12%
9/16/2019	\$8.24	\$8.25	\$0.01	0.12%
9/17/2019	\$8.18	\$8.19	\$0.01	0.12%
9/18/2019	\$8.05	\$8.06	\$0.01	0.12%
9/19/2019	\$8.07	\$8.08	\$0.01	0.12%
9/20/2019	\$7.99	\$8.00	\$0.01	0.13%
9/23/2019	\$7.77	\$7.78	\$0.01	0.13%
9/24/2019	\$7.57	\$7.58	\$0.01	0.13%
9/25/2019	\$7.58	\$7.59	\$0.01	0.13%
9/26/2019	\$7.41	\$7.42	\$0.01	0.13%
9/27/2019	\$7.55	\$7.56	\$0.01	0.13%
9/30/2019	\$7.49	\$7.50	\$0.01	0.13%
10/1/2019	\$7.25	\$7.26	\$0.01	0.14%
10/2/2019	\$7.19	\$7.20	\$0.01	0.14%
10/3/2019	\$7.16	\$7.17	\$0.01	0.14%
10/4/2019	\$7.19	\$7.20	\$0.01	0.14%
10/7/2019	\$7.08	\$7.09	\$0.01	0.14%
10/8/2019	\$6.92	\$6.93	\$0.01	0.14%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
10/9/2019	\$6.94	\$6.95	\$0.01	0.14%
10/10/2019	\$7.13	\$7.14	\$0.01	0.14%
10/11/2019	\$7.47	\$7.48	\$0.01	0.13%
10/14/2019	\$7.55	\$7.56	\$0.01	0.13%
10/15/2019	\$7.78	\$7.79	\$0.01	0.13%
10/16/2019	\$7.84	\$7.85	\$0.01	0.13%
10/17/2019	\$7.90	\$7.91	\$0.01	0.13%
10/18/2019	\$7.93	\$7.94	\$0.01	0.13%
10/21/2019	\$8.08	\$8.09	\$0.01	0.12%
10/22/2019	\$7.91	\$7.92	\$0.01	0.13%
10/23/2019	\$7.99	\$8.00	\$0.01	0.13%
10/24/2019	\$7.89	\$7.90	\$0.01	0.13%
10/25/2019	\$7.96	\$7.97	\$0.01	0.13%
10/28/2019	\$8.04	\$8.05	\$0.01	0.12%
10/29/2019	\$7.97	\$7.98	\$0.01	0.13%
10/30/2019	\$7.37	\$7.38	\$0.01	0.14%
10/31/2019	\$7.25	\$7.26	\$0.01	0.14%
11/1/2019	\$7.37	\$7.38	\$0.01	0.14%
11/4/2019	\$7.65	\$7.66	\$0.01	0.13%
11/5/2019	\$7.61	\$7.62	\$0.01	0.13%
11/6/2019	\$7.64	\$7.65	\$0.01	0.13%
11/7/2019	\$7.76	\$7.77	\$0.01	0.13%
11/8/2019	\$7.62	\$7.63	\$0.01	0.13%
11/11/2019	\$7.60	\$7.61	\$0.01	0.13%
11/12/2019	\$7.63	\$7.64	\$0.01	0.13%
11/13/2019	\$7.29	\$7.30	\$0.01	0.14%
11/14/2019	\$7.21	\$7.22	\$0.01	0.14%
11/15/2019	\$7.30	\$7.31	\$0.01	0.14%
11/18/2019	\$7.34	\$7.35	\$0.01	0.14%
11/19/2019	\$7.33	\$7.34	\$0.01	0.14%
11/20/2019	\$7.29	\$7.30	\$0.01	0.14%
11/21/2019	\$7.38	\$7.39	\$0.01	0.14%
11/22/2019	\$7.35	\$7.36	\$0.01	0.14%
11/25/2019	\$7.37	\$7.38	\$0.01	0.14%
11/26/2019	\$7.28	\$7.29	\$0.01	0.14%
11/27/2019	\$7.35	\$7.36	\$0.01	0.14%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
11/29/2019	\$7.20	\$7.21	\$0.01	0.14%
12/2/2019	\$7.18	\$7.19	\$0.01	0.14%
12/3/2019	\$7.06	\$7.07	\$0.01	0.14%
12/4/2019	\$7.17	\$7.18	\$0.01	0.14%
12/5/2019	\$7.17	\$7.18	\$0.01	0.14%
12/6/2019	\$7.22	\$7.23	\$0.01	0.14%
12/9/2019	\$7.21	\$7.22	\$0.01	0.14%
12/10/2019	\$7.18	\$7.19	\$0.01	0.14%
12/11/2019	\$7.26	\$7.27	\$0.01	0.14%
12/12/2019	\$7.57	\$7.58	\$0.01	0.13%
12/13/2019	\$7.47	\$7.48	\$0.01	0.13%
12/16/2019	\$7.69	\$7.70	\$0.01	0.13%
12/17/2019	\$7.80	\$7.81	\$0.01	0.13%
12/18/2019	\$7.75	\$7.76	\$0.01	0.13%
12/19/2019	\$7.88	\$7.89	\$0.01	0.13%
12/20/2019	\$7.77	\$7.78	\$0.01	0.13%
12/23/2019	\$7.66	\$7.67	\$0.01	0.13%
12/24/2019	\$7.62	\$7.63	\$0.01	0.13%
12/26/2019	\$7.65	\$7.66	\$0.01	0.13%
12/27/2019	\$7.69	\$7.70	\$0.01	0.13%
12/30/2019	\$7.74	\$7.75	\$0.01	0.13%
12/31/2019	\$7.77	\$7.78	\$0.01	0.13%
1/2/2020	\$8.31	\$8.32	\$0.01	0.12%
1/3/2020	\$8.11	\$8.12	\$0.01	0.12%
1/6/2020	\$8.05	\$8.06	\$0.01	0.12%
1/7/2020	\$8.24	\$8.25	\$0.01	0.12%
1/8/2020	\$8.56	\$8.57	\$0.01	0.12%
1/9/2020	\$8.60	\$8.61	\$0.01	0.12%
1/10/2020	\$8.51	\$8.52	\$0.01	0.12%
1/13/2020	\$8.47	\$8.48	\$0.01	0.12%
1/14/2020	\$8.57	\$8.58	\$0.01	0.12%
1/15/2020	\$8.41	\$8.42	\$0.01	0.12%
1/16/2020	\$8.53	\$8.54	\$0.01	0.12%
1/17/2020	\$8.42	\$8.43	\$0.01	0.12%
1/21/2020	\$8.27	\$8.28	\$0.01	0.12%
1/22/2020	\$8.40	\$8.41	\$0.01	0.12%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
1/23/2020	\$8.55	\$8.56	\$0.01	0.12%
1/24/2020	\$8.56	\$8.57	\$0.01	0.12%
1/27/2020	\$8.53	\$8.54	\$0.01	0.12%
1/28/2020	\$8.66	\$8.67	\$0.01	0.12%
1/29/2020	\$8.76	\$8.77	\$0.01	0.11%
1/30/2020	\$9.28	\$9.29	\$0.01	0.11%
1/31/2020	\$9.14	\$9.15	\$0.01	0.11%
2/3/2020	\$8.96	\$8.97	\$0.01	0.11%
2/4/2020	\$8.99	\$9.00	\$0.01	0.11%
2/5/2020	\$9.11	\$9.12	\$0.01	0.11%
2/6/2020	\$10.35	\$10.36	\$0.01	0.10%
2/7/2020	\$10.40	\$10.41	\$0.01	0.10%
2/10/2020	\$10.31	\$10.32	\$0.01	0.10%
2/11/2020	\$10.50	\$10.51	\$0.01	0.10%
2/12/2020	\$10.85	\$10.86	\$0.01	0.09%
2/13/2020	\$11.02	\$11.03	\$0.01	0.09%
2/14/2020	\$11.03	\$11.04	\$0.01	0.09%
2/18/2020	\$10.71	\$10.72	\$0.01	0.09%
2/19/2020	\$10.67	\$10.68	\$0.01	0.09%
2/20/2020	\$10.67	\$10.68	\$0.01	0.09%
2/21/2020	\$10.24	\$10.25	\$0.01	0.10%
2/24/2020	\$9.64	\$9.65	\$0.01	0.10%
2/25/2020	\$9.33	\$9.34	\$0.01	0.11%
2/26/2020	\$9.44	\$9.45	\$0.01	0.11%
2/27/2020	\$8.98	\$8.99	\$0.01	0.11%
2/28/2020	\$8.72	\$8.80	\$0.08	0.91%
3/2/2020	\$8.59	\$8.60	\$0.01	0.12%
3/3/2020	\$8.13	\$8.14	\$0.01	0.12%
3/4/2020	\$8.20	\$8.21	\$0.01	0.12%
3/5/2020	\$7.75	\$7.76	\$0.01	0.13%
3/6/2020	\$7.58	\$7.59	\$0.01	0.13%
3/9/2020	\$6.60	\$6.61	\$0.01	0.15%
3/10/2020	\$6.96	\$6.97	\$0.01	0.14%
3/11/2020	\$6.50	\$6.51	\$0.01	0.15%
3/12/2020	\$5.52	\$5.53	\$0.01	0.18%
3/13/2020	\$5.97	\$5.98	\$0.01	0.17%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
3/16/2020	\$5.47	\$5.48	\$0.01	0.18%
3/17/2020	\$5.78	\$5.79	\$0.01	0.17%
3/18/2020	\$5.56	\$5.57	\$0.01	0.18%
3/19/2020	\$5.86	\$5.87	\$0.01	0.17%
3/20/2020	\$5.75	\$5.76	\$0.01	0.17%
3/23/2020	\$5.84	\$5.85	\$0.01	0.17%
3/24/2020	\$6.58	\$6.59	\$0.01	0.15%
3/25/2020	\$6.88	\$6.89	\$0.01	0.15%
3/26/2020	\$6.99	\$7.00	\$0.01	0.14%
3/27/2020	\$6.46	\$6.47	\$0.01	0.15%
3/30/2020	\$6.51	\$6.52	\$0.01	0.15%
3/31/2020	\$6.42	\$6.43	\$0.01	0.16%
4/1/2020	\$5.95	\$5.96	\$0.01	0.17%
4/2/2020	\$6.02	\$6.03	\$0.01	0.17%
4/3/2020	\$5.89	\$5.90	\$0.01	0.17%
4/6/2020	\$6.38	\$6.39	\$0.01	0.16%
4/7/2020	\$6.64	\$6.65	\$0.01	0.15%
4/8/2020	\$6.53	\$6.54	\$0.01	0.15%
4/9/2020	\$6.69	\$6.70	\$0.01	0.15%
4/13/2020	\$6.51	\$6.52	\$0.01	0.15%
4/14/2020	\$6.84	\$6.85	\$0.01	0.15%
4/15/2020	\$6.23	\$6.24	\$0.01	0.16%
4/16/2020	\$6.22	\$6.23	\$0.01	0.16%
4/17/2020	\$6.54	\$6.55	\$0.01	0.15%
4/20/2020	\$6.33	\$6.34	\$0.01	0.16%
4/21/2020	\$6.08	\$6.09	\$0.01	0.16%
4/22/2020	\$6.08	\$6.09	\$0.01	0.16%
4/23/2020	\$6.17	\$6.18	\$0.01	0.16%
4/24/2020	\$5.94	\$5.95	\$0.01	0.17%
4/27/2020	\$6.68	\$6.69	\$0.01	0.15%
4/28/2020	\$6.85	\$6.86	\$0.01	0.15%
4/29/2020	\$7.67	\$7.68	\$0.01	0.13%
4/30/2020	\$7.41	\$7.42	\$0.01	0.13%
5/1/2020	\$7.15	\$7.16	\$0.01	0.14%
5/4/2020	\$7.05	\$7.06	\$0.01	0.14%
5/5/2020	\$6.97	\$6.98	\$0.01	0.14%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
5/6/2020	\$6.80	\$6.81	\$0.01	0.15%
5/7/2020	\$6.99	\$7.00	\$0.01	0.14%
5/8/2020	\$7.13	\$7.14	\$0.01	0.14%
5/11/2020	\$6.93	\$6.94	\$0.01	0.14%
5/12/2020	\$6.90	\$6.91	\$0.01	0.14%
5/13/2020	\$6.60	\$6.61	\$0.01	0.15%
5/14/2020	\$6.65	\$6.66	\$0.01	0.15%
5/15/2020	\$6.44	\$6.45	\$0.01	0.16%
5/18/2020	\$7.12	\$7.13	\$0.01	0.14%
5/19/2020	\$7.06	\$7.07	\$0.01	0.14%
5/20/2020	\$7.50	\$7.51	\$0.01	0.13%
5/21/2020	\$7.35	\$7.36	\$0.01	0.14%
5/22/2020	\$7.32	\$7.33	\$0.01	0.14%
5/26/2020	\$8.20	\$8.21	\$0.01	0.12%
5/27/2020	\$8.67	\$8.68	\$0.01	0.12%
5/28/2020	\$8.49	\$8.50	\$0.01	0.12%
5/29/2020	\$8.40	\$8.41	\$0.01	0.12%
6/1/2020	\$8.68	\$8.69	\$0.01	0.12%
6/2/2020	\$8.89	\$8.90	\$0.01	0.11%
6/3/2020	\$9.21	\$9.22	\$0.01	0.11%
6/4/2020	\$9.48	\$9.49	\$0.01	0.11%
6/5/2020	\$9.69	\$9.70	\$0.01	0.10%
6/8/2020	\$10.20	\$10.21	\$0.01	0.10%
6/9/2020	\$9.81	\$9.82	\$0.01	0.10%
6/10/2020	\$9.78	\$9.79	\$0.01	0.10%
6/11/2020	\$9.00	\$9.01	\$0.01	0.11%
6/12/2020	\$9.38	\$9.39	\$0.01	0.11%
6/15/2020	\$9.47	\$9.48	\$0.01	0.11%
6/16/2020	\$9.55	\$9.56	\$0.01	0.10%
6/17/2020	\$9.34	\$9.35	\$0.01	0.11%
6/18/2020	\$9.24	\$9.25	\$0.01	0.11%
6/19/2020	\$9.21	\$9.22	\$0.01	0.11%
6/22/2020	\$9.34	\$9.35	\$0.01	0.11%
6/23/2020	\$9.55	\$9.56	\$0.01	0.10%
6/24/2020	\$9.12	\$9.13	\$0.01	0.11%
6/25/2020	\$9.57	\$9.58	\$0.01	0.10%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
6/26/2020	\$8.99	\$9.00	\$0.01	0.11%
6/29/2020	\$9.45	\$9.46	\$0.01	0.11%
6/30/2020	\$9.52	\$9.53	\$0.01	0.10%
7/1/2020	\$9.31	\$9.32	\$0.01	0.11%
7/2/2020	\$9.53	\$9.54	\$0.01	0.10%
7/6/2020	\$9.94	\$9.95	\$0.01	0.10%
7/7/2020	\$9.82	\$9.83	\$0.01	0.10%
7/8/2020	\$9.99	\$10.00	\$0.01	0.10%
7/9/2020	\$9.72	\$9.73	\$0.01	0.10%
7/10/2020	\$10.09	\$10.10	\$0.01	0.10%
7/13/2020	\$9.73	\$9.74	\$0.01	0.10%
7/14/2020	\$10.01	\$10.02	\$0.01	0.10%
7/15/2020	\$10.18	\$10.19	\$0.01	0.10%
7/16/2020	\$10.03	\$10.04	\$0.01	0.10%
7/17/2020	\$9.96	\$9.97	\$0.01	0.10%
7/20/2020	\$10.17	\$10.18	\$0.01	0.10%
7/21/2020	\$9.73	\$9.74	\$0.01	0.10%
7/22/2020	\$9.83	\$9.84	\$0.01	0.10%
7/23/2020	\$9.62	\$9.63	\$0.01	0.10%
7/24/2020	\$9.60	\$9.61	\$0.01	0.10%
7/27/2020	\$9.54	\$9.55	\$0.01	0.10%
7/28/2020	\$9.44	\$9.45	\$0.01	0.11%
7/29/2020	\$9.21	\$9.22	\$0.01	0.11%
7/30/2020	\$9.00	\$9.01	\$0.01	0.11%
7/31/2020	\$8.92	\$8.93	\$0.01	0.11%
8/3/2020	\$9.22	\$9.23	\$0.01	0.11%
8/4/2020	\$9.24	\$9.25	\$0.01	0.11%
8/5/2020	\$9.34	\$9.35	\$0.01	0.11%
8/6/2020	\$9.22	\$9.23	\$0.01	0.11%
8/7/2020	\$9.21	\$9.22	\$0.01	0.11%
8/10/2020	\$9.41	\$9.42	\$0.01	0.11%
8/11/2020	\$9.56	\$9.57	\$0.01	0.10%
8/12/2020	\$9.69	\$9.70	\$0.01	0.10%
8/13/2020	\$9.55	\$9.56	\$0.01	0.10%
8/14/2020	\$9.52	\$9.53	\$0.01	0.10%
8/17/2020	\$9.46	\$9.47	\$0.01	0.11%

Exhibit 10A**Deutsche Bank AG (US)****Bid Ask Spreads on the NYSE**

Source: Bloomberg

	DB	NYSE Sample	DB	NYSE Sample
	Spread (\$)	Spread (\$)	Spread (%)	Spread (%)
Average	\$0.01	\$0.04	0.10%	0.12%
Median	\$0.01	\$0.03	0.10%	0.09%

DB's Stock				
Date	Last Bid	Last Ask	Spread (\$)	Spread (%)
8/18/2020	\$9.39	\$9.40	\$0.01	0.11%
8/19/2020	\$9.53	\$9.54	\$0.01	0.10%
8/20/2020	\$9.34	\$9.35	\$0.01	0.11%
8/21/2020	\$9.17	\$9.18	\$0.01	0.11%
8/24/2020	\$9.59	\$9.60	\$0.01	0.10%
8/25/2020	\$9.64	\$9.65	\$0.01	0.10%
8/26/2020	\$9.80	\$9.81	\$0.01	0.10%
8/27/2020	\$9.72	\$9.73	\$0.01	0.10%
8/28/2020	\$9.88	\$9.89	\$0.01	0.10%
8/31/2020	\$9.52	\$9.53	\$0.01	0.10%
9/1/2020	\$9.52	\$9.53	\$0.01	0.10%
9/2/2020	\$9.44	\$9.45	\$0.01	0.11%
9/3/2020	\$9.29	\$9.30	\$0.01	0.11%
9/4/2020	\$9.72	\$9.73	\$0.01	0.10%
9/8/2020	\$9.40	\$9.41	\$0.01	0.11%
9/9/2020	\$9.41	\$9.42	\$0.01	0.11%
9/10/2020	\$9.35	\$9.36	\$0.01	0.11%
9/11/2020	\$9.25	\$9.26	\$0.01	0.11%
9/14/2020	\$9.33	\$9.34	\$0.01	0.11%
9/15/2020	\$9.10	\$9.11	\$0.01	0.11%
9/16/2020	\$9.29	\$9.30	\$0.01	0.11%
9/17/2020	\$9.24	\$9.25	\$0.01	0.11%
9/18/2020	\$9.08	\$9.09	\$0.01	0.11%

Exhibit 10B**Deutsche Bank AG (US)****Companies Used for Bid Ask Spread Analysis on the NYSE**

Bloomberg Symbol	Company
ANF US Equity	ABERCROMBIE & FI
WMS US Equity	ADVANCED DRAINAG
AER US Equity	AERCAP HOLDINGS
AJRD US Equity	AEROJET ROCKETDY
Y US Equity	ALLEGHANY CORP
ATI US Equity	ALLEGHENY TECH
AEL US Equity	AMER EQUITY INVT
AMN US Equity	AMN HEALTHCARE
AON US Equity	AON PLC-CLASS A
AIT US Equity	APPLIED INDU TEC
AROC US Equity	ARCHROCK INC
AORT US Equity	ARTIVION INC
ASH US Equity	ASHLAND GLOBAL H
ATTO US Equity	ATENTO SA
ALV US Equity	AUTOLIV INC
AXS US Equity	AXIS CAPITAL
BVH US Equity	BLUEGREEN VACATI
BCO US Equity	BRINK'S CO/THE
BMY US Equity	BRISTOL-MYER SQB
CADE US Equity	CADENCE BANK
CHGG US Equity	CHEGG INC
CGA US Equity	CHINA GREEN AGRI
C US Equity	CITIGROUP INC
CLW US Equity	CLEARWATER
CLF US Equity	CLEVELAND-CLIFFS
DLX US Equity	DELUXE CORP
DSX US Equity	DIANA SHIPPING I
DFIN US Equity	DONNELLEY FINANC
DOV US Equity	DOVER CORP
DD US Equity	DUPONT DE NEMOUR
DY US Equity	DYCOM INDS
KODK US Equity	EASTMAN KODAK CO
ETN US Equity	EATON CORP PLC
EXPR US Equity	EXPRESS INC
RACE US Equity	FERRARI NV
FCF US Equity	FIRST COMMON FIN
FLO US Equity	FLOWERS FOODS
FNB US Equity	FNB CORP
FL US Equity	FOOT LOCKER INC
F US Equity	FORD MOTOR CO
BEN US Equity	FRANKLIN RES INC
FSK US Equity	FS KKR CAPITAL C

Exhibit 10B**Deutsche Bank AG (US)****Companies Used for Bid Ask Spread Analysis on the NYSE**

Bloomberg Symbol	Company
GCP US Equity	GCP APPLIED TECH
GM US Equity	GENERAL MOTORS C
HAL US Equity	HALLIBURTON CO
HLX US Equity	HELIX ENERGY SOL
HRTG US Equity	HERITAGE INSURAN
HD US Equity	HOME DEPOT INC
HII US Equity	HUNTINGTON INGAL
NGVT US Equity	INGEVITY CORP
SJM US Equity	JM SMUCKER CO
KNX US Equity	KNIGHT-SWIFT TRA
KR US Equity	KROGER CO
LPI US Equity	LAREDO PETROLEUM
LIN US Equity	LINDE PLC
LNN US Equity	LINDSAY CORP
LUMN US Equity	LUMEN TECHNOLOGI
MANU US Equity	MANCHESTER UNI-A
MAN US Equity	MANPOWERGROUP IN
MET US Equity	METLIFE INC
NFG US Equity	NATL FUEL GAS CO
NLS US Equity	NAUTILUS INC
NVGS US Equity	NAVIGATOR HOLDIN
NNI US Equity	NELNET INC-CL A
NEWR US Equity	NEW RELIC INC
NEU US Equity	NEWMARKET CORP
NEM US Equity	NEWMONT CORP
NEE US Equity	NEXTERA ENERGY
OXY US Equity	OCCIDENTAL PETE
OI US Equity	O-I GLASS INC
ODC US Equity	OIL DRI CORP
PFSI US Equity	PENNYMAC FINANCI
PCG US Equity	PG&E CORP
PJT US Equity	PJT PARTNERS - A
PRLB US Equity	PROTO LABS INC
DGX US Equity	QUEST DIAGNOSTIC
RYAM US Equity	RAYONIER ADV
ROK US Equity	ROCKWELL AUTOMAT
ROL US Equity	ROLLINS INC
RPM US Equity	RPM INTL INC
SBH US Equity	SALLY BEAUTY HOL
SAR US Equity	SARATOGA INVESTM
SXT US Equity	SENSIENT TECHNOL
SHW US Equity	SHERWIN-WILLIAMS

Exhibit 10B**Deutsche Bank AG (US)****Companies Used for Bid Ask Spread Analysis on the NYSE**

Bloomberg Symbol	Company
TSLX US Equity	SIXTH STREET SPE
TRC US Equity	TEJON RANCH CO
TFX US Equity	TELEFLEX INC
TJX US Equity	TJX COS INC
TR US Equity	TOOTSIE ROLL IND
TROX US Equity	TRONOX HOLDING-A
TWLO US Equity	TWILIO INC - A
UI US Equity	UBIQUITI INC
UGI US Equity	UGI CORP
UTL US Equity	UNITIL CORP
VSH US Equity	VISHAY INTERTECH
VST US Equity	VISTRA CORP
WTS US Equity	WATTS WATER TE-A
W US Equity	WAYFAIR INC- A
WFC US Equity	WELLS FARGO & CO
WWE US Equity	WORLD WRESTLIN-A

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
3/14/2017	€ 16.21	€ 16.23	€ 0.02	0.12%
3/15/2017	€ 16.12	€ 16.31	€ 0.20	1.21%
3/16/2017	€ 16.22	€ 16.27	€ 0.05	0.30%
3/17/2017	€ 15.86	€ 15.90	€ 0.04	0.24%
3/20/2017	€ 15.26	€ 15.28	€ 0.02	0.12%
3/21/2017	€ 15.83	€ 15.87	€ 0.04	0.27%
3/22/2017	€ 15.78	€ 15.83	€ 0.05	0.34%
3/23/2017	€ 15.67	€ 15.72	€ 0.05	0.34%
3/24/2017	€ 15.51	€ 15.56	€ 0.06	0.36%
3/27/2017	€ 15.57	€ 15.63	€ 0.06	0.38%
3/28/2017	€ 16.04	€ 16.11	€ 0.07	0.41%
3/29/2017	€ 16.13	€ 16.22	€ 0.09	0.55%
3/30/2017	€ 16.13	€ 16.20	€ 0.07	0.41%
3/31/2017	€ 16.03	€ 16.11	€ 0.08	0.47%
4/3/2017	€ 15.62	€ 15.64	€ 0.02	0.13%
4/4/2017	€ 15.57	€ 15.61	€ 0.04	0.26%
4/5/2017	€ 15.45	€ 15.55	€ 0.10	0.65%
4/6/2017	€ 15.61	€ 15.62	€ 0.02	0.12%
4/7/2017	€ 15.53	€ 15.59	€ 0.06	0.38%
4/10/2017	€ 15.55	€ 15.58	€ 0.03	0.18%
4/11/2017	€ 15.39	€ 15.40	€ 0.01	0.06%
4/12/2017	€ 15.20	€ 15.22	€ 0.02	0.13%
4/13/2017	€ 14.96	€ 15.00	€ 0.03	0.23%
4/18/2017	€ 14.89	€ 14.91	€ 0.02	0.11%
4/19/2017	€ 14.99	€ 15.02	€ 0.03	0.21%
4/20/2017	€ 15.42	€ 15.44	€ 0.03	0.16%
4/21/2017	€ 15.45	€ 15.50	€ 0.05	0.30%
4/24/2017	€ 16.91	€ 16.94	€ 0.03	0.17%
4/25/2017	€ 16.91	€ 16.96	€ 0.05	0.31%
4/26/2017	€ 17.29	€ 17.33	€ 0.04	0.21%
4/27/2017	€ 16.70	€ 16.72	€ 0.02	0.10%
4/28/2017	€ 16.54	€ 16.55	€ 0.01	0.06%
5/2/2017	€ 16.73	€ 16.77	€ 0.04	0.26%
5/3/2017	€ 16.91	€ 16.94	€ 0.03	0.18%
5/4/2017	€ 17.10	€ 17.12	€ 0.02	0.13%
5/5/2017	€ 17.57	€ 17.58	€ 0.01	0.06%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
5/8/2017	€ 17.42	€ 17.46	€ 0.04	0.24%
5/9/2017	€ 17.35	€ 17.37	€ 0.02	0.09%
5/10/2017	€ 17.45	€ 17.51	€ 0.06	0.34%
5/11/2017	€ 17.31	€ 17.32	€ 0.02	0.10%
5/12/2017	€ 17.18	€ 17.23	€ 0.04	0.24%
5/15/2017	€ 17.36	€ 17.38	€ 0.02	0.12%
5/16/2017	€ 17.38	€ 17.40	€ 0.02	0.10%
5/17/2017	€ 16.75	€ 16.78	€ 0.03	0.16%
5/18/2017	€ 16.82	€ 16.89	€ 0.07	0.42%
5/19/2017	€ 17.04	€ 17.07	€ 0.04	0.21%
5/22/2017	€ 16.99	€ 17.03	€ 0.03	0.19%
5/23/2017	€ 17.19	€ 17.22	€ 0.03	0.20%
5/24/2017	€ 16.91	€ 16.95	€ 0.04	0.21%
5/25/2017	€ 16.80	€ 16.84	€ 0.04	0.24%
5/26/2017	€ 16.52	€ 16.53	€ 0.01	0.08%
5/29/2017	€ 16.39	€ 16.44	€ 0.05	0.31%
5/30/2017	€ 16.08	€ 16.10	€ 0.02	0.12%
5/31/2017	€ 15.58	€ 15.59	€ 0.01	0.06%
6/1/2017	€ 15.74	€ 15.75	€ 0.01	0.08%
6/2/2017	€ 15.65	€ 15.70	€ 0.05	0.31%
6/5/2017	€ 15.62	€ 15.66	€ 0.04	0.29%
6/6/2017	€ 15.31	€ 15.36	€ 0.05	0.33%
6/7/2017	€ 15.49	€ 15.52	€ 0.03	0.21%
6/8/2017	€ 15.60	€ 15.65	€ 0.05	0.35%
6/9/2017	€ 15.78	€ 15.81	€ 0.03	0.18%
6/12/2017	€ 15.50	€ 15.51	€ 0.01	0.06%
6/13/2017	€ 15.56	€ 15.63	€ 0.07	0.42%
6/14/2017	€ 15.38	€ 15.43	€ 0.05	0.31%
6/15/2017	€ 15.11	€ 15.12	€ 0.01	0.07%
6/16/2017	€ 15.01	€ 15.04	€ 0.03	0.19%
6/19/2017	€ 15.42	€ 15.44	€ 0.02	0.13%
6/20/2017	€ 15.18	€ 15.19	€ 0.01	0.07%
6/21/2017	€ 15.13	€ 15.17	€ 0.04	0.26%
6/22/2017	€ 15.02	€ 15.05	€ 0.03	0.23%
6/23/2017	€ 14.90	€ 14.92	€ 0.02	0.12%
6/26/2017	€ 15.07	€ 15.09	€ 0.02	0.10%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
6/27/2017	€ 15.42	€ 15.44	€ 0.02	0.10%
6/28/2017	€ 15.73	€ 15.78	€ 0.05	0.32%
6/29/2017	€ 15.80	€ 15.83	€ 0.03	0.16%
6/30/2017	€ 15.57	€ 15.61	€ 0.03	0.21%
7/3/2017	€ 16.00	€ 16.05	€ 0.05	0.30%
7/4/2017	€ 16.29	€ 16.31	€ 0.02	0.14%
7/5/2017	€ 16.42	€ 16.47	€ 0.05	0.30%
7/6/2017	€ 16.58	€ 16.59	€ 0.01	0.06%
7/7/2017	€ 16.68	€ 16.71	€ 0.03	0.18%
7/10/2017	€ 16.65	€ 16.66	€ 0.00	0.02%
7/11/2017	€ 16.61	€ 16.65	€ 0.04	0.27%
7/12/2017	€ 16.47	€ 16.48	€ 0.01	0.06%
7/13/2017	€ 16.54	€ 16.59	€ 0.04	0.27%
7/14/2017	€ 16.44	€ 16.45	€ 0.01	0.09%
7/17/2017	€ 16.34	€ 16.38	€ 0.04	0.22%
7/18/2017	€ 15.99	€ 16.00	€ 0.01	0.08%
7/19/2017	€ 15.93	€ 15.96	€ 0.03	0.18%
7/20/2017	€ 15.85	€ 15.88	€ 0.03	0.20%
7/21/2017	€ 15.58	€ 15.62	€ 0.04	0.26%
7/24/2017	€ 16.04	€ 16.07	€ 0.03	0.17%
7/25/2017	€ 16.37	€ 16.41	€ 0.04	0.25%
7/26/2017	€ 16.27	€ 16.31	€ 0.04	0.28%
7/27/2017	€ 15.43	€ 15.45	€ 0.02	0.16%
7/28/2017	€ 15.47	€ 15.51	€ 0.04	0.23%
7/31/2017	€ 15.11	€ 15.12	€ 0.01	0.07%
8/1/2017	€ 15.36	€ 15.39	€ 0.03	0.19%
8/2/2017	€ 15.17	€ 15.19	€ 0.02	0.16%
8/3/2017	€ 15.19	€ 15.24	€ 0.05	0.34%
8/4/2017	€ 15.57	€ 15.58	€ 0.01	0.06%
8/7/2017	€ 15.49	€ 15.51	€ 0.02	0.14%
8/8/2017	€ 15.32	€ 15.37	€ 0.05	0.33%
8/9/2017	€ 14.93	€ 14.97	€ 0.04	0.27%
8/10/2017	€ 14.29	€ 14.34	€ 0.04	0.31%
8/11/2017	€ 14.37	€ 14.45	€ 0.08	0.54%
8/14/2017	€ 14.65	€ 14.69	€ 0.03	0.22%
8/15/2017	€ 14.61	€ 14.65	€ 0.04	0.27%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
8/16/2017	€ 14.47	€ 14.52	€ 0.05	0.34%
8/17/2017	€ 14.00	€ 14.05	€ 0.04	0.31%
8/18/2017	€ 14.05	€ 14.05	€ 0.00	0.03%
8/21/2017	€ 13.69	€ 13.73	€ 0.04	0.30%
8/22/2017	€ 13.84	€ 13.86	€ 0.02	0.18%
8/23/2017	€ 13.75	€ 13.78	€ 0.03	0.18%
8/24/2017	€ 13.77	€ 13.82	€ 0.04	0.32%
8/25/2017	€ 13.78	€ 13.81	€ 0.02	0.18%
8/28/2017	€ 13.68	€ 13.69	€ 0.01	0.06%
8/29/2017	€ 13.40	€ 13.45	€ 0.05	0.34%
8/30/2017	€ 13.48	€ 13.49	€ 0.01	0.07%
8/31/2017	€ 13.45	€ 13.46	€ 0.01	0.07%
9/1/2017	€ 13.51	€ 13.54	€ 0.03	0.22%
9/4/2017	€ 13.46	€ 13.49	€ 0.04	0.27%
9/5/2017	€ 13.14	€ 13.17	€ 0.03	0.25%
9/6/2017	€ 13.43	€ 13.46	€ 0.03	0.22%
9/7/2017	€ 13.26	€ 13.30	€ 0.04	0.29%
9/8/2017	€ 13.30	€ 13.33	€ 0.03	0.20%
9/11/2017	€ 13.66	€ 13.69	€ 0.03	0.20%
9/12/2017	€ 14.22	€ 14.24	€ 0.02	0.14%
9/13/2017	€ 14.10	€ 14.16	€ 0.06	0.41%
9/14/2017	€ 13.99	€ 14.03	€ 0.04	0.31%
9/15/2017	€ 13.84	€ 13.86	€ 0.02	0.12%
9/18/2017	€ 13.82	€ 13.87	€ 0.05	0.33%
9/19/2017	€ 13.79	€ 13.83	€ 0.04	0.28%
9/20/2017	€ 13.73	€ 13.74	€ 0.01	0.07%
9/21/2017	€ 13.98	€ 14.00	€ 0.02	0.14%
9/22/2017	€ 13.91	€ 13.94	€ 0.03	0.22%
9/25/2017	€ 13.53	€ 13.57	€ 0.04	0.30%
9/26/2017	€ 13.60	€ 13.61	€ 0.01	0.07%
9/27/2017	€ 14.12	€ 14.13	€ 0.01	0.08%
9/28/2017	€ 14.40	€ 14.44	€ 0.04	0.25%
9/29/2017	€ 14.60	€ 14.64	€ 0.04	0.27%
10/2/2017	€ 14.53	€ 14.56	€ 0.02	0.15%
10/3/2017	€ 14.50	€ 14.58	€ 0.08	0.55%
10/4/2017	€ 14.29	€ 14.31	€ 0.02	0.15%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
10/5/2017	€ 14.68	€ 14.71	€ 0.03	0.18%
10/6/2017	€ 14.67	€ 14.70	€ 0.03	0.19%
10/9/2017	€ 14.38	€ 14.39	€ 0.01	0.08%
10/10/2017	€ 14.36	€ 14.38	€ 0.02	0.12%
10/11/2017	€ 14.25	€ 14.27	€ 0.02	0.14%
10/12/2017	€ 14.12	€ 14.13	€ 0.01	0.07%
10/13/2017	€ 14.03	€ 14.05	€ 0.03	0.19%
10/16/2017	€ 14.15	€ 14.18	€ 0.03	0.21%
10/17/2017	€ 14.19	€ 14.23	€ 0.04	0.25%
10/18/2017	€ 14.35	€ 14.38	€ 0.03	0.21%
10/19/2017	€ 14.23	€ 14.26	€ 0.03	0.20%
10/20/2017	€ 14.41	€ 14.44	€ 0.03	0.21%
10/23/2017	€ 14.14	€ 14.19	€ 0.04	0.31%
10/24/2017	€ 14.61	€ 14.64	€ 0.03	0.21%
10/25/2017	€ 14.51	€ 14.54	€ 0.03	0.20%
10/26/2017	€ 14.36	€ 14.38	€ 0.02	0.15%
10/27/2017	€ 14.06	€ 14.10	€ 0.04	0.28%
10/30/2017	€ 13.96	€ 13.99	€ 0.04	0.27%
10/31/2017	€ 13.97	€ 14.05	€ 0.07	0.54%
11/1/2017	€ 14.19	€ 14.23	€ 0.04	0.30%
11/2/2017	€ 14.61	€ 14.66	€ 0.05	0.37%
11/3/2017	€ 14.44	€ 14.49	€ 0.05	0.37%
11/6/2017	€ 14.48	€ 14.52	€ 0.04	0.30%
11/7/2017	€ 14.40	€ 14.45	€ 0.05	0.33%
11/8/2017	€ 14.65	€ 14.70	€ 0.04	0.29%
11/9/2017	€ 14.94	€ 14.96	€ 0.02	0.13%
11/10/2017	€ 15.41	€ 15.42	€ 0.01	0.07%
11/13/2017	€ 15.35	€ 15.40	€ 0.05	0.34%
11/14/2017	€ 15.42	€ 15.46	€ 0.04	0.26%
11/15/2017	€ 15.70	€ 15.73	€ 0.03	0.18%
11/16/2017	€ 16.16	€ 16.20	€ 0.04	0.26%
11/17/2017	€ 16.20	€ 16.24	€ 0.03	0.22%
11/20/2017	€ 16.30	€ 16.34	€ 0.04	0.26%
11/21/2017	€ 16.18	€ 16.21	€ 0.03	0.17%
11/22/2017	€ 16.01	€ 16.02	€ 0.01	0.09%
11/23/2017	€ 15.95	€ 15.99	€ 0.05	0.29%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
11/24/2017	€ 16.03	€ 16.07	€ 0.04	0.26%
11/27/2017	€ 15.78	€ 15.78	€ 0.00	0.00%
11/28/2017	€ 15.90	€ 15.96	€ 0.06	0.36%
11/29/2017	€ 16.00	€ 16.02	€ 0.02	0.10%
11/30/2017	€ 15.82	€ 15.88	€ 0.06	0.35%
12/1/2017	€ 15.90	€ 15.96	€ 0.06	0.36%
12/4/2017	€ 16.09	€ 16.13	€ 0.04	0.25%
12/5/2017	€ 15.89	€ 15.89	€ 0.01	0.06%
12/6/2017	€ 15.71	€ 15.71	€ 0.01	0.03%
12/7/2017	€ 15.94	€ 15.99	€ 0.05	0.29%
12/8/2017	€ 16.42	€ 16.48	€ 0.06	0.35%
12/11/2017	€ 16.38	€ 16.43	€ 0.05	0.29%
12/12/2017	€ 16.50	€ 16.50	€ 0.00	-0.01%
12/13/2017	€ 16.38	€ 16.39	€ 0.02	0.10%
12/14/2017	€ 16.30	€ 16.32	€ 0.02	0.14%
12/15/2017	€ 16.53	€ 16.54	€ 0.01	0.07%
12/18/2017	€ 17.03	€ 17.08	€ 0.06	0.33%
12/19/2017	€ 16.75	€ 16.80	€ 0.05	0.29%
12/20/2017	€ 16.60	€ 16.62	€ 0.02	0.11%
12/21/2017	€ 16.56	€ 16.59	€ 0.03	0.20%
12/22/2017	€ 16.34	€ 16.37	€ 0.03	0.17%
12/27/2017	€ 16.03	€ 16.04	€ 0.01	0.09%
12/28/2017	€ 15.98	€ 16.00	€ 0.02	0.11%
12/29/2017	€ 15.85	€ 15.85	€ 0.00	0.00%
1/2/2018	€ 16.01	€ 16.04	€ 0.03	0.19%
1/3/2018	€ 15.93	€ 15.96	€ 0.03	0.20%
1/4/2018	€ 16.36	€ 16.39	€ 0.03	0.21%
1/5/2018	€ 15.37	€ 15.43	€ 0.05	0.35%
1/8/2018	€ 15.29	€ 15.33	€ 0.04	0.26%
1/9/2018	€ 15.15	€ 15.20	€ 0.05	0.30%
1/10/2018	€ 15.49	€ 15.52	€ 0.03	0.18%
1/11/2018	€ 15.41	€ 15.43	€ 0.02	0.13%
1/12/2018	€ 15.30	€ 15.31	€ 0.02	0.10%
1/15/2018	€ 15.33	€ 15.39	€ 0.06	0.40%
1/16/2018	€ 15.06	€ 15.12	€ 0.06	0.40%
1/17/2018	€ 15.13	€ 15.19	€ 0.06	0.40%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
1/18/2018	€ 15.17	€ 15.19	€ 0.02	0.11%
1/19/2018	€ 15.31	€ 15.34	€ 0.03	0.18%
1/22/2018	€ 15.81	€ 15.83	€ 0.02	0.13%
1/23/2018	€ 15.82	€ 15.88	€ 0.06	0.35%
1/24/2018	€ 15.89	€ 15.96	€ 0.07	0.43%
1/25/2018	€ 15.79	€ 15.85	€ 0.06	0.37%
1/26/2018	€ 15.70	€ 15.74	€ 0.04	0.25%
1/29/2018	€ 15.44	€ 15.47	€ 0.03	0.18%
1/30/2018	€ 14.82	€ 14.87	€ 0.05	0.35%
1/31/2018	€ 14.80	€ 14.80	€ 0.01	0.04%
2/1/2018	€ 14.84	€ 14.87	€ 0.03	0.20%
2/2/2018	€ 13.70	€ 13.76	€ 0.06	0.44%
2/5/2018	€ 13.21	€ 13.27	€ 0.06	0.47%
2/6/2018	€ 13.32	€ 13.36	€ 0.04	0.30%
2/7/2018	€ 13.13	€ 13.15	€ 0.02	0.12%
2/8/2018	€ 12.66	€ 12.67	€ 0.01	0.08%
2/9/2018	€ 12.71	€ 12.76	€ 0.04	0.35%
2/12/2018	€ 13.07	€ 13.07	€ 0.00	0.00%
2/13/2018	€ 12.88	€ 12.90	€ 0.02	0.12%
2/14/2018	€ 13.03	€ 13.07	€ 0.05	0.35%
2/15/2018	€ 12.87	€ 12.92	€ 0.05	0.40%
2/16/2018	€ 12.92	€ 12.96	€ 0.04	0.29%
2/19/2018	€ 13.24	€ 13.30	€ 0.06	0.45%
2/20/2018	€ 13.31	€ 13.36	€ 0.05	0.38%
2/21/2018	€ 13.50	€ 13.52	€ 0.02	0.18%
2/22/2018	€ 13.35	€ 13.37	€ 0.03	0.21%
2/23/2018	€ 13.34	€ 13.39	€ 0.05	0.37%
2/26/2018	€ 13.36	€ 13.42	€ 0.06	0.42%
2/27/2018	€ 13.36	€ 13.43	€ 0.07	0.49%
2/28/2018	€ 13.07	€ 13.09	€ 0.02	0.18%
3/1/2018	€ 12.80	€ 12.83	€ 0.04	0.30%
3/2/2018	€ 12.77	€ 12.83	€ 0.05	0.41%
3/5/2018	€ 12.90	€ 12.93	€ 0.02	0.19%
3/6/2018	€ 12.91	€ 12.96	€ 0.05	0.37%
3/7/2018	€ 13.12	€ 13.16	€ 0.04	0.27%
3/8/2018	€ 13.06	€ 13.11	€ 0.05	0.41%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
3/9/2018	€ 13.08	€ 13.11	€ 0.03	0.23%
3/12/2018	€ 13.00	€ 13.06	€ 0.06	0.46%
3/13/2018	€ 12.79	€ 12.84	€ 0.05	0.36%
3/14/2018	€ 12.68	€ 12.74	€ 0.06	0.49%
3/15/2018	€ 12.77	€ 12.83	€ 0.06	0.48%
3/16/2018	€ 12.84	€ 12.89	€ 0.05	0.40%
3/19/2018	€ 12.60	€ 12.66	€ 0.06	0.49%
3/20/2018	€ 12.68	€ 12.72	€ 0.04	0.35%
3/21/2018	€ 12.01	€ 12.07	€ 0.06	0.48%
3/22/2018	€ 11.50	€ 11.53	€ 0.02	0.21%
3/23/2018	€ 11.15	€ 11.18	€ 0.04	0.32%
3/26/2018	€ 11.29	€ 11.30	€ 0.01	0.09%
3/27/2018	€ 11.09	€ 11.13	€ 0.04	0.34%
3/28/2018	€ 11.17	€ 11.21	€ 0.04	0.36%
3/29/2018	€ 11.36	€ 11.39	€ 0.03	0.23%
4/3/2018	€ 11.17	€ 11.21	€ 0.04	0.36%
4/4/2018	€ 11.28	€ 11.31	€ 0.03	0.27%
4/5/2018	€ 11.67	€ 11.73	€ 0.06	0.50%
4/6/2018	€ 11.27	€ 11.30	€ 0.03	0.28%
4/9/2018	€ 11.37	€ 11.40	€ 0.03	0.28%
4/10/2018	€ 11.40	€ 11.42	€ 0.02	0.19%
4/11/2018	€ 11.46	€ 11.50	€ 0.04	0.37%
4/12/2018	€ 11.66	€ 11.72	€ 0.06	0.48%
4/13/2018	€ 11.63	€ 11.69	€ 0.06	0.50%
4/16/2018	€ 11.59	€ 11.62	€ 0.03	0.22%
4/17/2018	€ 11.62	€ 11.65	€ 0.03	0.22%
4/18/2018	€ 11.68	€ 11.70	€ 0.03	0.24%
4/19/2018	€ 11.68	€ 11.74	€ 0.06	0.50%
4/20/2018	€ 11.57	€ 11.61	€ 0.04	0.33%
4/23/2018	€ 11.65	€ 11.70	€ 0.05	0.39%
4/24/2018	€ 12.05	€ 12.11	€ 0.05	0.45%
4/25/2018	€ 11.98	€ 12.03	€ 0.05	0.45%
4/26/2018	€ 11.84	€ 11.89	€ 0.04	0.35%
4/27/2018	€ 11.42	€ 11.45	€ 0.03	0.28%
4/30/2018	€ 11.31	€ 11.34	€ 0.03	0.28%
5/2/2018	€ 11.40	€ 11.43	€ 0.03	0.30%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
5/3/2018	€ 11.34	€ 11.38	€ 0.05	0.40%
5/4/2018	€ 11.53	€ 11.54	€ 0.01	0.09%
5/7/2018	€ 11.52	€ 11.58	€ 0.05	0.47%
5/8/2018	€ 11.43	€ 11.47	€ 0.04	0.35%
5/9/2018	€ 11.59	€ 11.63	€ 0.04	0.33%
5/10/2018	€ 11.62	€ 11.68	€ 0.06	0.50%
5/11/2018	€ 11.59	€ 11.64	€ 0.05	0.40%
5/14/2018	€ 11.42	€ 11.46	€ 0.05	0.40%
5/15/2018	€ 11.22	€ 11.24	€ 0.02	0.18%
5/16/2018	€ 10.99	€ 11.03	€ 0.04	0.35%
5/17/2018	€ 11.01	€ 11.04	€ 0.04	0.33%
5/18/2018	€ 10.79	€ 10.84	€ 0.05	0.48%
5/21/2018	€ 10.84	€ 10.90	€ 0.06	0.55%
5/22/2018	€ 10.99	€ 11.02	€ 0.03	0.29%
5/23/2018	€ 10.99	€ 10.99	€ 0.00	0.02%
5/24/2018	€ 10.50	€ 10.53	€ 0.03	0.32%
5/25/2018	€ 10.38	€ 10.39	€ 0.01	0.10%
5/28/2018	€ 10.32	€ 10.32	€ 0.00	0.04%
5/29/2018	€ 9.77	€ 9.81	€ 0.04	0.38%
5/30/2018	€ 9.91	€ 9.95	€ 0.04	0.43%
5/31/2018	€ 9.45	€ 9.51	€ 0.06	0.63%
6/1/2018	€ 9.48	€ 9.51	€ 0.02	0.26%
6/4/2018	€ 9.54	€ 9.59	€ 0.05	0.51%
6/5/2018	€ 9.40	€ 9.45	€ 0.05	0.57%
6/6/2018	€ 9.59	€ 9.63	€ 0.05	0.48%
6/7/2018	€ 9.74	€ 9.79	€ 0.05	0.51%
6/8/2018	€ 9.59	€ 9.62	€ 0.03	0.31%
6/11/2018	€ 9.70	€ 9.73	€ 0.03	0.30%
6/12/2018	€ 9.66	€ 9.70	€ 0.04	0.45%
6/13/2018	€ 9.62	€ 9.68	€ 0.06	0.60%
6/14/2018	€ 9.66	€ 9.71	€ 0.05	0.50%
6/15/2018	€ 9.53	€ 9.59	€ 0.06	0.61%
6/18/2018	€ 9.52	€ 9.53	€ 0.01	0.14%
6/19/2018	€ 9.59	€ 9.66	€ 0.07	0.73%
6/20/2018	€ 9.58	€ 9.62	€ 0.03	0.33%
6/21/2018	€ 9.36	€ 9.42	€ 0.06	0.61%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
6/22/2018	€ 9.45	€ 9.46	€ 0.01	0.13%
6/25/2018	€ 9.27	€ 9.31	€ 0.04	0.41%
6/26/2018	€ 9.23	€ 9.28	€ 0.05	0.52%
6/27/2018	€ 8.93	€ 8.97	€ 0.04	0.45%
6/28/2018	€ 9.09	€ 9.10	€ 0.01	0.08%
6/29/2018	€ 9.13	€ 9.15	€ 0.02	0.19%
7/2/2018	€ 9.16	€ 9.16	€ 0.00	0.00%
7/3/2018	€ 9.24	€ 9.24	€ 0.00	0.00%
7/4/2018	€ 9.35	€ 9.38	€ 0.04	0.37%
7/5/2018	€ 9.54	€ 9.54	€ 0.00	0.00%
7/6/2018	€ 9.77	€ 9.80	€ 0.03	0.31%
7/9/2018	€ 9.79	€ 9.81	€ 0.02	0.20%
7/10/2018	€ 9.72	€ 9.73	€ 0.01	0.06%
7/11/2018	€ 9.56	€ 9.58	€ 0.01	0.15%
7/12/2018	€ 9.59	€ 9.61	€ 0.03	0.29%
7/13/2018	€ 9.61	€ 9.63	€ 0.01	0.15%
7/16/2018	€ 10.38	€ 10.40	€ 0.02	0.19%
7/17/2018	€ 10.16	€ 10.18	€ 0.02	0.22%
7/18/2018	€ 10.34	€ 10.37	€ 0.03	0.27%
7/19/2018	€ 10.31	€ 10.33	€ 0.02	0.21%
7/20/2018	€ 10.26	€ 10.26	€ 0.01	0.06%
7/23/2018	€ 10.38	€ 10.39	€ 0.01	0.10%
7/24/2018	€ 10.52	€ 10.52	€ 0.00	0.00%
7/25/2018	€ 10.35	€ 10.36	€ 0.01	0.08%
7/26/2018	€ 10.46	€ 10.48	€ 0.02	0.23%
7/27/2018	€ 10.61	€ 10.62	€ 0.02	0.15%
7/30/2018	€ 10.91	€ 10.93	€ 0.02	0.18%
7/31/2018	€ 11.20	€ 11.20	€ 0.00	0.04%
8/1/2018	€ 11.11	€ 11.11	€ 0.01	0.07%
8/2/2018	€ 10.78	€ 10.83	€ 0.05	0.46%
8/3/2018	€ 10.82	€ 10.82	€ 0.00	0.00%
8/6/2018	€ 10.81	€ 10.83	€ 0.03	0.24%
8/7/2018	€ 10.91	€ 10.92	€ 0.01	0.11%
8/8/2018	€ 10.77	€ 10.79	€ 0.02	0.19%
8/9/2018	€ 10.74	€ 10.76	€ 0.02	0.22%
8/10/2018	€ 10.32	€ 10.33	€ 0.01	0.10%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
8/13/2018	€ 10.04	€ 10.06	€ 0.01	0.14%
8/14/2018	€ 10.10	€ 10.12	€ 0.02	0.22%
8/15/2018	€ 9.84	€ 9.85	€ 0.01	0.11%
8/16/2018	€ 9.87	€ 9.88	€ 0.01	0.06%
8/17/2018	€ 9.79	€ 9.79	€ 0.00	0.00%
8/20/2018	€ 9.76	€ 9.79	€ 0.02	0.21%
8/21/2018	€ 9.97	€ 9.98	€ 0.01	0.11%
8/22/2018	€ 10.00	€ 10.01	€ 0.01	0.06%
8/23/2018	€ 9.80	€ 9.82	€ 0.01	0.13%
8/24/2018	€ 9.79	€ 9.81	€ 0.01	0.14%
8/27/2018	€ 10.03	€ 10.06	€ 0.03	0.28%
8/28/2018	€ 9.86	€ 9.88	€ 0.02	0.21%
8/29/2018	€ 9.95	€ 9.97	€ 0.01	0.13%
8/30/2018	€ 9.73	€ 9.75	€ 0.03	0.26%
8/31/2018	€ 9.69	€ 9.71	€ 0.02	0.22%
9/3/2018	€ 9.76	€ 9.78	€ 0.03	0.26%
9/4/2018	€ 9.85	€ 9.86	€ 0.00	0.03%
9/5/2018	€ 9.88	€ 9.90	€ 0.02	0.22%
9/6/2018	€ 9.76	€ 9.79	€ 0.03	0.26%
9/7/2018	€ 9.60	€ 9.63	€ 0.03	0.28%
9/10/2018	€ 9.58	€ 9.59	€ 0.01	0.06%
9/11/2018	€ 9.68	€ 9.70	€ 0.02	0.21%
9/12/2018	€ 9.64	€ 9.66	€ 0.01	0.16%
9/13/2018	€ 9.72	€ 9.74	€ 0.02	0.24%
9/14/2018	€ 9.80	€ 9.82	€ 0.02	0.16%
9/17/2018	€ 9.85	€ 9.87	€ 0.03	0.27%
9/18/2018	€ 9.92	€ 9.94	€ 0.02	0.19%
9/19/2018	€ 10.23	€ 10.23	€ 0.00	0.00%
9/20/2018	€ 10.40	€ 10.42	€ 0.02	0.19%
9/21/2018	€ 10.48	€ 10.50	€ 0.02	0.19%
9/24/2018	€ 10.41	€ 10.43	€ 0.02	0.21%
9/25/2018	€ 10.33	€ 10.35	€ 0.02	0.21%
9/26/2018	€ 10.15	€ 10.17	€ 0.02	0.24%
9/27/2018	€ 10.14	€ 10.16	€ 0.02	0.18%
9/28/2018	€ 9.77	€ 9.79	€ 0.02	0.26%
10/1/2018	€ 9.73	€ 9.73	€ 0.00	0.00%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
10/2/2018	€ 9.63	€ 9.64	€ 0.01	0.13%
10/3/2018	€ 9.80	€ 9.84	€ 0.04	0.39%
10/4/2018	€ 9.72	€ 9.73	€ 0.01	0.07%
10/5/2018	€ 9.68	€ 9.69	€ 0.01	0.09%
10/8/2018	€ 9.59	€ 9.61	€ 0.02	0.25%
10/9/2018	€ 9.61	€ 9.62	€ 0.01	0.12%
10/10/2018	€ 9.49	€ 9.50	€ 0.01	0.13%
10/11/2018	€ 9.36	€ 9.36	€ 0.01	0.07%
10/12/2018	€ 9.38	€ 9.41	€ 0.03	0.31%
10/15/2018	€ 9.52	€ 9.54	€ 0.02	0.19%
10/16/2018	€ 9.62	€ 9.66	€ 0.04	0.37%
10/17/2018	€ 9.79	€ 9.81	€ 0.03	0.26%
10/18/2018	€ 9.57	€ 9.59	€ 0.02	0.25%
10/19/2018	€ 9.50	€ 9.51	€ 0.01	0.09%
10/22/2018	€ 9.35	€ 9.37	€ 0.02	0.21%
10/23/2018	€ 9.32	€ 9.35	€ 0.03	0.28%
10/24/2018	€ 8.78	€ 8.80	€ 0.02	0.18%
10/25/2018	€ 8.79	€ 8.79	€ 0.00	0.03%
10/26/2018	€ 8.48	€ 8.50	€ 0.02	0.28%
10/29/2018	€ 8.44	€ 8.45	€ 0.01	0.13%
10/30/2018	€ 8.60	€ 8.66	€ 0.06	0.65%
10/31/2018	€ 8.65	€ 8.68	€ 0.03	0.29%
11/1/2018	€ 8.99	€ 9.02	€ 0.03	0.31%
11/2/2018	€ 9.22	€ 9.25	€ 0.03	0.29%
11/5/2018	€ 9.18	€ 9.19	€ 0.01	0.09%
11/6/2018	€ 9.13	€ 9.15	€ 0.02	0.27%
11/7/2018	€ 9.26	€ 9.27	€ 0.01	0.05%
11/8/2018	€ 9.09	€ 9.10	€ 0.01	0.15%
11/9/2018	€ 8.92	€ 8.94	€ 0.02	0.18%
11/12/2018	€ 8.66	€ 8.66	€ 0.00	0.00%
11/13/2018	€ 8.75	€ 8.77	€ 0.02	0.27%
11/14/2018	€ 8.70	€ 8.72	€ 0.02	0.28%
11/15/2018	€ 8.68	€ 8.71	€ 0.03	0.35%
11/16/2018	€ 8.63	€ 8.65	€ 0.02	0.19%
11/19/2018	€ 8.52	€ 8.53	€ 0.01	0.14%
11/20/2018	€ 8.12	€ 8.14	€ 0.02	0.22%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
11/21/2018	€ 8.29	€ 8.29	€ 0.01	0.08%
11/22/2018	€ 8.23	€ 8.25	€ 0.01	0.17%
11/23/2018	€ 8.18	€ 8.21	€ 0.03	0.32%
11/26/2018	€ 8.59	€ 8.60	€ 0.01	0.08%
11/27/2018	€ 8.69	€ 8.72	€ 0.02	0.28%
11/28/2018	€ 8.67	€ 8.67	€ 0.00	0.05%
11/29/2018	€ 8.28	€ 8.29	€ 0.01	0.10%
11/30/2018	€ 8.10	€ 8.11	€ 0.01	0.14%
12/3/2018	€ 8.30	€ 8.31	€ 0.01	0.07%
12/4/2018	€ 8.00	€ 8.02	€ 0.02	0.27%
12/5/2018	€ 8.07	€ 8.10	€ 0.02	0.30%
12/6/2018	€ 7.85	€ 7.87	€ 0.03	0.32%
12/7/2018	€ 7.67	€ 7.67	€ 0.00	0.01%
12/10/2018	€ 7.37	€ 7.38	€ 0.01	0.14%
12/11/2018	€ 7.39	€ 7.41	€ 0.02	0.22%
12/12/2018	€ 7.96	€ 7.99	€ 0.03	0.36%
12/13/2018	€ 7.82	€ 7.84	€ 0.02	0.24%
12/14/2018	€ 7.77	€ 7.79	€ 0.02	0.24%
12/17/2018	€ 7.57	€ 7.59	€ 0.02	0.26%
12/18/2018	€ 7.63	€ 7.64	€ 0.01	0.09%
12/19/2018	€ 7.37	€ 7.39	€ 0.02	0.23%
12/20/2018	€ 7.01	€ 7.03	€ 0.02	0.28%
12/21/2018	€ 6.92	€ 6.94	€ 0.02	0.29%
12/27/2018	€ 6.81	€ 6.84	€ 0.02	0.34%
12/28/2018	€ 6.97	€ 6.97	€ 0.00	0.00%
1/2/2019	€ 7.21	€ 7.22	€ 0.01	0.18%
1/3/2019	€ 7.10	€ 7.11	€ 0.01	0.17%
1/4/2019	€ 7.44	€ 7.47	€ 0.02	0.34%
1/7/2019	€ 7.56	€ 7.58	€ 0.03	0.36%
1/8/2019	€ 7.64	€ 7.66	€ 0.02	0.27%
1/9/2019	€ 7.41	€ 7.43	€ 0.02	0.32%
1/10/2019	€ 7.49	€ 7.51	€ 0.02	0.23%
1/11/2019	€ 7.46	€ 7.47	€ 0.01	0.19%
1/14/2019	€ 7.45	€ 7.48	€ 0.03	0.39%
1/15/2019	€ 7.53	€ 7.55	€ 0.02	0.30%
1/16/2019	€ 8.10	€ 8.15	€ 0.05	0.62%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
1/17/2019	€ 7.82	€ 7.84	€ 0.02	0.29%
1/18/2019	€ 8.01	€ 8.02	€ 0.01	0.07%
1/21/2019	€ 7.98	€ 8.01	€ 0.02	0.29%
1/22/2019	€ 7.79	€ 7.80	€ 0.01	0.14%
1/23/2019	€ 7.93	€ 7.95	€ 0.02	0.25%
1/24/2019	€ 7.81	€ 7.83	€ 0.02	0.23%
1/25/2019	€ 8.11	€ 8.12	€ 0.01	0.14%
1/28/2019	€ 8.09	€ 8.14	€ 0.05	0.62%
1/29/2019	€ 8.08	€ 8.10	€ 0.02	0.21%
1/30/2019	€ 8.10	€ 8.11	€ 0.01	0.17%
1/31/2019	€ 7.76	€ 7.76	€ 0.01	0.09%
2/1/2019	€ 7.72	€ 7.73	€ 0.01	0.09%
2/4/2019	€ 7.67	€ 7.68	€ 0.01	0.17%
2/5/2019	€ 7.80	€ 7.82	€ 0.02	0.23%
2/6/2019	€ 7.88	€ 7.89	€ 0.00	0.06%
2/7/2019	€ 7.39	€ 7.41	€ 0.02	0.27%
2/8/2019	€ 7.23	€ 7.24	€ 0.00	0.07%
2/11/2019	€ 7.37	€ 7.38	€ 0.01	0.11%
2/12/2019	€ 7.53	€ 7.55	€ 0.03	0.34%
2/13/2019	€ 7.56	€ 7.57	€ 0.01	0.17%
2/14/2019	€ 7.37	€ 7.39	€ 0.02	0.31%
2/15/2019	€ 7.76	€ 7.77	€ 0.01	0.17%
2/18/2019	€ 7.73	€ 7.76	€ 0.03	0.39%
2/19/2019	€ 7.57	€ 7.60	€ 0.02	0.29%
2/20/2019	€ 7.68	€ 7.70	€ 0.02	0.25%
2/21/2019	€ 7.62	€ 7.63	€ 0.01	0.14%
2/22/2019	€ 7.62	€ 7.63	€ 0.00	0.07%
2/25/2019	€ 7.71	€ 7.74	€ 0.03	0.34%
2/26/2019	€ 7.81	€ 7.82	€ 0.01	0.12%
2/27/2019	€ 8.01	€ 8.02	€ 0.01	0.12%
2/28/2019	€ 8.13	€ 8.15	€ 0.02	0.21%
3/1/2019	€ 8.18	€ 8.20	€ 0.02	0.24%
3/4/2019	€ 8.09	€ 8.10	€ 0.01	0.19%
3/5/2019	€ 8.07	€ 8.08	€ 0.02	0.19%
3/6/2019	€ 8.10	€ 8.13	€ 0.03	0.32%
3/7/2019	€ 7.75	€ 7.76	€ 0.01	0.15%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
3/8/2019	€ 7.69	€ 7.71	€ 0.01	0.17%
3/11/2019	€ 8.09	€ 8.10	€ 0.01	0.11%
3/12/2019	€ 7.85	€ 7.88	€ 0.03	0.38%
3/13/2019	€ 7.95	€ 7.98	€ 0.03	0.33%
3/14/2019	€ 7.87	€ 7.89	€ 0.02	0.29%
3/15/2019	€ 7.81	€ 7.83	€ 0.03	0.32%
3/18/2019	€ 8.12	€ 8.14	€ 0.02	0.25%
3/19/2019	€ 7.94	€ 7.97	€ 0.03	0.34%
3/20/2019	€ 7.68	€ 7.70	€ 0.02	0.21%
3/21/2019	€ 7.45	€ 7.45	€ 0.00	0.03%
3/22/2019	€ 7.27	€ 7.29	€ 0.03	0.34%
3/25/2019	€ 7.23	€ 7.24	€ 0.01	0.15%
3/26/2019	€ 7.33	€ 7.36	€ 0.03	0.38%
3/27/2019	€ 7.49	€ 7.53	€ 0.03	0.44%
3/28/2019	€ 7.28	€ 7.30	€ 0.03	0.36%
3/29/2019	€ 7.24	€ 7.27	€ 0.02	0.33%
4/1/2019	€ 7.60	€ 7.63	€ 0.02	0.33%
4/2/2019	€ 7.60	€ 7.61	€ 0.02	0.21%
4/3/2019	€ 7.63	€ 7.64	€ 0.01	0.10%
4/4/2019	€ 7.57	€ 7.59	€ 0.02	0.26%
4/5/2019	€ 7.45	€ 7.47	€ 0.02	0.34%
4/8/2019	€ 7.37	€ 7.38	€ 0.01	0.18%
4/9/2019	€ 7.30	€ 7.31	€ 0.01	0.16%
4/10/2019	€ 7.26	€ 7.28	€ 0.02	0.25%
4/11/2019	€ 7.46	€ 7.46	€ 0.00	0.07%
4/12/2019	€ 7.62	€ 7.63	€ 0.01	0.08%
4/15/2019	€ 7.63	€ 7.65	€ 0.02	0.25%
4/16/2019	€ 7.83	€ 7.84	€ 0.01	0.08%
4/17/2019	€ 7.88	€ 7.89	€ 0.01	0.14%
4/18/2019	€ 7.78	€ 7.81	€ 0.03	0.33%
4/23/2019	€ 7.59	€ 7.62	€ 0.03	0.36%
4/24/2019	€ 7.61	€ 7.62	€ 0.01	0.16%
4/25/2019	€ 7.52	€ 7.54	€ 0.02	0.31%
4/26/2019	€ 7.34	€ 7.35	€ 0.01	0.19%
4/29/2019	€ 7.42	€ 7.42	€ 0.00	0.01%
4/30/2019	€ 7.36	€ 7.37	€ 0.02	0.23%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
5/2/2019	€ 7.37	€ 7.38	€ 0.01	0.14%
5/3/2019	€ 7.34	€ 7.35	€ 0.01	0.14%
5/6/2019	€ 7.22	€ 7.24	€ 0.02	0.30%
5/7/2019	€ 7.00	€ 7.00	€ 0.00	0.06%
5/8/2019	€ 7.02	€ 7.03	€ 0.01	0.17%
5/9/2019	€ 6.91	€ 6.94	€ 0.02	0.33%
5/10/2019	€ 6.99	€ 7.01	€ 0.02	0.29%
5/13/2019	€ 6.79	€ 6.80	€ 0.01	0.18%
5/14/2019	€ 6.86	€ 6.87	€ 0.01	0.20%
5/15/2019	€ 6.84	€ 6.86	€ 0.02	0.36%
5/16/2019	€ 6.87	€ 6.89	€ 0.02	0.35%
5/17/2019	€ 6.80	€ 6.81	€ 0.00	0.07%
5/20/2019	€ 6.65	€ 6.68	€ 0.03	0.41%
5/21/2019	€ 6.72	€ 6.74	€ 0.02	0.33%
5/22/2019	€ 6.58	€ 6.61	€ 0.02	0.38%
5/23/2019	€ 6.48	€ 6.50	€ 0.02	0.31%
5/24/2019	€ 6.39	€ 6.40	€ 0.01	0.11%
5/27/2019	€ 6.48	€ 6.52	€ 0.04	0.58%
5/28/2019	€ 6.30	€ 6.31	€ 0.01	0.13%
5/29/2019	€ 6.19	€ 6.21	€ 0.02	0.27%
5/30/2019	€ 6.17	€ 6.23	€ 0.06	1.03%
5/31/2019	€ 6.04	€ 6.06	€ 0.01	0.25%
6/3/2019	€ 5.98	€ 5.99	€ 0.01	0.13%
6/4/2019	€ 6.23	€ 6.31	€ 0.08	1.29%
6/5/2019	€ 6.13	€ 6.15	€ 0.01	0.24%
6/6/2019	€ 5.98	€ 5.99	€ 0.01	0.20%
6/7/2019	€ 5.97	€ 5.98	€ 0.01	0.22%
6/10/2019	€ 6.06	€ 6.11	€ 0.05	0.74%
6/11/2019	€ 6.15	€ 6.17	€ 0.02	0.32%
6/12/2019	€ 6.11	€ 6.12	€ 0.01	0.20%
6/13/2019	€ 6.10	€ 6.11	€ 0.01	0.21%
6/14/2019	€ 6.04	€ 6.06	€ 0.02	0.30%
6/17/2019	€ 6.08	€ 6.10	€ 0.02	0.35%
6/18/2019	€ 6.30	€ 6.32	€ 0.02	0.35%
6/19/2019	€ 6.41	€ 6.41	€ 0.00	0.05%
6/20/2019	€ 6.35	€ 6.35	€ 0.00	0.05%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
6/21/2019	€ 6.29	€ 6.32	€ 0.03	0.40%
6/24/2019	€ 6.24	€ 6.26	€ 0.02	0.34%
6/25/2019	€ 6.24	€ 6.27	€ 0.03	0.40%
6/26/2019	€ 6.48	€ 6.50	€ 0.02	0.32%
6/27/2019	€ 6.62	€ 6.65	€ 0.03	0.42%
6/28/2019	€ 6.70	€ 6.72	€ 0.02	0.34%
7/1/2019	€ 6.75	€ 6.78	€ 0.02	0.34%
7/2/2019	€ 6.72	€ 6.73	€ 0.01	0.10%
7/3/2019	€ 6.94	€ 6.95	€ 0.01	0.16%
7/4/2019	€ 6.99	€ 7.01	€ 0.01	0.21%
7/5/2019	€ 7.16	€ 7.18	€ 0.02	0.35%
7/8/2019	€ 6.73	€ 6.74	€ 0.01	0.16%
7/9/2019	€ 6.50	€ 6.53	€ 0.03	0.43%
7/10/2019	€ 6.56	€ 6.57	€ 0.01	0.17%
7/11/2019	€ 6.62	€ 6.64	€ 0.02	0.38%
7/12/2019	€ 6.78	€ 6.80	€ 0.02	0.24%
7/15/2019	€ 6.90	€ 6.91	€ 0.01	0.13%
7/16/2019	€ 7.10	€ 7.12	€ 0.01	0.18%
7/17/2019	€ 7.01	€ 7.04	€ 0.03	0.44%
7/18/2019	€ 7.02	€ 7.04	€ 0.02	0.23%
7/19/2019	€ 6.89	€ 6.90	€ 0.01	0.12%
7/22/2019	€ 6.93	€ 6.95	€ 0.02	0.24%
7/23/2019	€ 7.12	€ 7.14	€ 0.02	0.31%
7/24/2019	€ 7.09	€ 7.10	€ 0.01	0.14%
7/25/2019	€ 7.10	€ 7.13	€ 0.02	0.31%
7/26/2019	€ 7.12	€ 7.14	€ 0.01	0.21%
7/29/2019	€ 7.02	€ 7.05	€ 0.03	0.40%
7/30/2019	€ 6.91	€ 6.95	€ 0.04	0.58%
7/31/2019	€ 7.02	€ 7.10	€ 0.08	1.13%
8/1/2019	€ 6.85	€ 6.89	€ 0.04	0.52%
8/2/2019	€ 7.07	€ 7.09	€ 0.02	0.28%
8/5/2019	€ 6.84	€ 6.85	€ 0.01	0.16%
8/6/2019	€ 6.82	€ 6.82	€ 0.00	0.00%
8/7/2019	€ 6.67	€ 6.68	€ 0.01	0.21%
8/8/2019	€ 6.84	€ 6.86	€ 0.02	0.29%
8/9/2019	€ 6.71	€ 6.72	€ 0.02	0.22%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
8/12/2019	€ 6.18	€ 6.21	€ 0.03	0.42%
8/13/2019	€ 6.42	€ 6.45	€ 0.03	0.39%
8/14/2019	€ 6.02	€ 6.03	€ 0.01	0.20%
8/15/2019	€ 5.82	€ 5.83	€ 0.01	0.21%
8/16/2019	€ 6.22	€ 6.24	€ 0.02	0.39%
8/19/2019	€ 6.34	€ 6.36	€ 0.02	0.32%
8/20/2019	€ 6.29	€ 6.30	€ 0.01	0.10%
8/21/2019	€ 6.33	€ 6.34	€ 0.01	0.19%
8/22/2019	€ 6.46	€ 6.49	€ 0.02	0.37%
8/23/2019	€ 6.25	€ 6.28	€ 0.02	0.35%
8/26/2019	€ 6.37	€ 6.37	€ 0.00	0.02%
8/27/2019	€ 6.44	€ 6.44	€ 0.00	0.00%
8/28/2019	€ 6.45	€ 6.47	€ 0.02	0.33%
8/29/2019	€ 6.53	€ 6.54	€ 0.01	0.18%
8/30/2019	€ 6.58	€ 6.61	€ 0.03	0.38%
9/2/2019	€ 6.63	€ 6.67	€ 0.04	0.54%
9/3/2019	€ 6.63	€ 6.65	€ 0.02	0.24%
9/4/2019	€ 6.76	€ 6.78	€ 0.02	0.28%
9/5/2019	€ 7.07	€ 7.09	€ 0.02	0.21%
9/6/2019	€ 7.09	€ 7.11	€ 0.02	0.23%
9/9/2019	€ 7.34	€ 7.37	€ 0.02	0.34%
9/10/2019	€ 7.49	€ 7.52	€ 0.03	0.33%
9/11/2019	€ 7.50	€ 7.51	€ 0.01	0.13%
9/12/2019	€ 7.49	€ 7.52	€ 0.03	0.35%
9/13/2019	€ 7.60	€ 7.62	€ 0.02	0.21%
9/16/2019	€ 7.48	€ 7.50	€ 0.02	0.24%
9/17/2019	€ 7.39	€ 7.39	€ 0.00	0.01%
9/18/2019	€ 7.27	€ 7.30	€ 0.03	0.36%
9/19/2019	€ 7.30	€ 7.32	€ 0.02	0.30%
9/20/2019	€ 7.25	€ 7.27	€ 0.02	0.23%
9/23/2019	€ 7.08	€ 7.09	€ 0.01	0.13%
9/24/2019	€ 6.86	€ 6.90	€ 0.04	0.58%
9/25/2019	€ 6.93	€ 6.95	€ 0.02	0.29%
9/26/2019	€ 6.78	€ 6.80	€ 0.02	0.29%
9/27/2019	€ 6.89	€ 6.90	€ 0.00	0.03%
9/30/2019	€ 6.87	€ 6.89	€ 0.02	0.29%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
10/1/2019	€ 6.64	€ 6.65	€ 0.00	0.06%
10/2/2019	€ 6.56	€ 6.58	€ 0.02	0.24%
10/3/2019	€ 6.45	€ 6.54	€ 0.09	1.38%
10/4/2019	€ 6.54	€ 6.55	€ 0.02	0.23%
10/7/2019	€ 6.46	€ 6.48	€ 0.02	0.26%
10/8/2019	€ 6.31	€ 6.32	€ 0.01	0.16%
10/9/2019	€ 6.31	€ 6.33	€ 0.02	0.30%
10/10/2019	€ 6.47	€ 6.47	€ 0.00	0.03%
10/11/2019	€ 6.79	€ 6.80	€ 0.00	0.07%
10/14/2019	€ 6.84	€ 6.86	€ 0.02	0.35%
10/15/2019	€ 7.04	€ 7.05	€ 0.01	0.16%
10/16/2019	€ 7.08	€ 7.10	€ 0.02	0.23%
10/17/2019	€ 7.10	€ 7.13	€ 0.02	0.34%
10/18/2019	€ 7.08	€ 7.10	€ 0.02	0.23%
10/21/2019	€ 7.25	€ 7.28	€ 0.02	0.33%
10/22/2019	€ 7.11	€ 7.13	€ 0.02	0.22%
10/23/2019	€ 7.17	€ 7.19	€ 0.01	0.20%
10/24/2019	€ 7.11	€ 7.14	€ 0.03	0.35%
10/25/2019	€ 7.15	€ 7.18	€ 0.03	0.43%
10/28/2019	€ 7.23	€ 7.26	€ 0.04	0.52%
10/29/2019	€ 7.18	€ 7.20	€ 0.02	0.24%
10/30/2019	€ 6.64	€ 6.66	€ 0.02	0.23%
10/31/2019	€ 6.48	€ 6.50	€ 0.02	0.28%
11/1/2019	€ 6.60	€ 6.62	€ 0.01	0.18%
11/4/2019	€ 6.85	€ 6.89	€ 0.04	0.55%
11/5/2019	€ 6.90	€ 6.91	€ 0.01	0.13%
11/6/2019	€ 6.89	€ 6.91	€ 0.02	0.23%
11/7/2019	€ 7.05	€ 7.06	€ 0.01	0.18%
11/8/2019	€ 6.91	€ 6.92	€ 0.01	0.19%
11/11/2019	€ 6.87	€ 6.91	€ 0.04	0.52%
11/12/2019	€ 6.93	€ 6.95	€ 0.02	0.22%
11/13/2019	€ 6.61	€ 6.64	€ 0.02	0.38%
11/14/2019	€ 6.53	€ 6.56	€ 0.03	0.38%
11/15/2019	€ 6.59	€ 6.62	€ 0.03	0.50%
11/18/2019	€ 6.62	€ 6.65	€ 0.03	0.45%
11/19/2019	€ 6.61	€ 6.61	€ 0.00	0.08%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
11/20/2019	€ 6.58	€ 6.58	€ 0.00	0.00%
11/21/2019	€ 6.67	€ 6.68	€ 0.02	0.28%
11/22/2019	€ 6.67	€ 6.67	€ 0.00	0.01%
11/25/2019	€ 6.68	€ 6.70	€ 0.02	0.25%
11/26/2019	€ 6.60	€ 6.63	€ 0.02	0.36%
11/27/2019	€ 6.68	€ 6.70	€ 0.02	0.34%
11/28/2019	€ 6.61	€ 6.63	€ 0.02	0.26%
11/29/2019	€ 6.57	€ 6.57	€ 0.00	0.06%
12/2/2019	€ 6.46	€ 6.48	€ 0.02	0.34%
12/3/2019	€ 6.37	€ 6.38	€ 0.01	0.16%
12/4/2019	€ 6.49	€ 6.50	€ 0.00	0.08%
12/5/2019	€ 6.45	€ 6.47	€ 0.02	0.34%
12/6/2019	€ 6.52	€ 6.54	€ 0.02	0.34%
12/9/2019	€ 6.52	€ 6.54	€ 0.02	0.25%
12/10/2019	€ 6.47	€ 6.49	€ 0.02	0.25%
12/11/2019	€ 6.52	€ 6.55	€ 0.03	0.38%
12/12/2019	€ 6.78	€ 6.79	€ 0.01	0.13%
12/13/2019	€ 6.72	€ 6.74	€ 0.02	0.31%
12/16/2019	€ 6.91	€ 6.93	€ 0.03	0.40%
12/17/2019	€ 6.98	€ 6.99	€ 0.01	0.17%
12/18/2019	€ 6.97	€ 6.97	€ 0.00	0.03%
12/19/2019	€ 7.08	€ 7.10	€ 0.02	0.25%
12/20/2019	€ 7.01	€ 7.03	€ 0.03	0.38%
12/23/2019	€ 6.90	€ 6.93	€ 0.02	0.32%
12/27/2019	€ 6.88	€ 6.89	€ 0.02	0.22%
12/30/2019	€ 6.94	€ 6.94	€ 0.00	0.00%
1/2/2020	€ 7.42	€ 7.44	€ 0.02	0.30%
1/3/2020	€ 7.24	€ 7.27	€ 0.03	0.37%
1/6/2020	€ 7.18	€ 7.22	€ 0.04	0.56%
1/7/2020	€ 7.39	€ 7.42	€ 0.03	0.38%
1/8/2020	€ 7.71	€ 7.72	€ 0.01	0.14%
1/9/2020	€ 7.73	€ 7.74	€ 0.01	0.14%
1/10/2020	€ 7.66	€ 7.67	€ 0.01	0.17%
1/13/2020	€ 7.59	€ 7.60	€ 0.01	0.08%
1/14/2020	€ 7.71	€ 7.71	€ 0.01	0.06%
1/15/2020	€ 7.54	€ 7.56	€ 0.02	0.28%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
1/16/2020	€ 7.66	€ 7.66	€ 0.00	0.05%
1/17/2020	€ 7.61	€ 7.61	€ 0.00	0.05%
1/20/2020	€ 7.43	€ 7.44	€ 0.00	0.03%
1/21/2020	€ 7.45	€ 7.47	€ 0.02	0.27%
1/22/2020	€ 7.55	€ 7.57	€ 0.02	0.26%
1/23/2020	€ 7.73	€ 7.75	€ 0.02	0.26%
1/24/2020	€ 7.75	€ 7.76	€ 0.01	0.17%
1/27/2020	€ 7.72	€ 7.74	€ 0.01	0.17%
1/28/2020	€ 7.84	€ 7.86	€ 0.02	0.27%
1/29/2020	€ 7.95	€ 7.97	€ 0.01	0.16%
1/30/2020	€ 8.40	€ 8.42	€ 0.02	0.25%
1/31/2020	€ 8.23	€ 8.25	€ 0.02	0.27%
2/3/2020	€ 8.11	€ 8.12	€ 0.01	0.16%
2/4/2020	€ 8.13	€ 8.16	€ 0.03	0.31%
2/5/2020	€ 8.27	€ 8.27	€ 0.00	0.04%
2/6/2020	€ 9.44	€ 9.45	€ 0.01	0.10%
2/7/2020	€ 9.48	€ 9.50	€ 0.02	0.19%
2/10/2020	€ 9.42	€ 9.44	€ 0.01	0.16%
2/11/2020	€ 9.63	€ 9.64	€ 0.00	0.04%
2/12/2020	€ 10.00	€ 10.02	€ 0.02	0.20%
2/13/2020	€ 10.17	€ 10.17	€ 0.00	0.02%
2/14/2020	€ 10.16	€ 10.18	€ 0.01	0.14%
2/17/2020	€ 10.16	€ 10.17	€ 0.01	0.12%
2/18/2020	€ 9.92	€ 9.93	€ 0.01	0.13%
2/19/2020	€ 9.86	€ 9.87	€ 0.01	0.09%
2/20/2020	€ 9.86	€ 9.90	€ 0.04	0.36%
2/21/2020	€ 9.43	€ 9.47	€ 0.04	0.43%
2/24/2020	€ 8.89	€ 8.90	€ 0.01	0.09%
2/25/2020	€ 8.57	€ 8.60	€ 0.03	0.29%
2/26/2020	€ 8.69	€ 8.71	€ 0.02	0.20%
2/27/2020	€ 8.15	€ 8.20	€ 0.05	0.64%
2/28/2020	€ 7.87	€ 7.91	€ 0.04	0.49%
3/2/2020	€ 7.69	€ 7.72	€ 0.03	0.43%
3/3/2020	€ 7.27	€ 7.29	€ 0.02	0.27%
3/4/2020	€ 7.38	€ 7.38	€ 0.00	0.07%
3/5/2020	€ 6.90	€ 6.92	€ 0.02	0.25%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
3/6/2020	€ 6.70	€ 6.72	€ 0.01	0.22%
3/9/2020	€ 5.83	€ 5.90	€ 0.07	1.13%
3/10/2020	€ 6.17	€ 6.24	€ 0.07	1.13%
3/11/2020	€ 5.73	€ 5.80	€ 0.07	1.20%
3/12/2020	€ 4.95	€ 5.00	€ 0.05	1.03%
3/13/2020	€ 5.37	€ 5.39	€ 0.02	0.32%
3/16/2020	€ 4.80	€ 4.83	€ 0.03	0.69%
3/17/2020	€ 5.20	€ 5.26	€ 0.06	1.13%
3/18/2020	€ 5.11	€ 5.18	€ 0.07	1.42%
3/19/2020	€ 5.46	€ 5.49	€ 0.02	0.46%
3/20/2020	€ 5.32	€ 5.36	€ 0.04	0.77%
3/23/2020	€ 5.53	€ 5.58	€ 0.05	0.92%
3/24/2020	€ 6.11	€ 6.13	€ 0.01	0.25%
3/25/2020	€ 6.34	€ 6.40	€ 0.06	1.02%
3/26/2020	€ 6.30	€ 6.34	€ 0.04	0.62%
3/27/2020	€ 5.80	€ 5.82	€ 0.02	0.31%
3/30/2020	€ 5.90	€ 5.92	€ 0.02	0.30%
3/31/2020	€ 5.82	€ 5.84	€ 0.02	0.39%
4/1/2020	€ 5.48	€ 5.52	€ 0.05	0.85%
4/2/2020	€ 5.55	€ 5.59	€ 0.04	0.72%
4/3/2020	€ 5.44	€ 5.47	€ 0.03	0.46%
4/6/2020	€ 5.88	€ 5.90	€ 0.02	0.41%
4/7/2020	€ 6.04	€ 6.08	€ 0.04	0.68%
4/8/2020	€ 6.01	€ 6.03	€ 0.01	0.25%
4/9/2020	€ 6.11	€ 6.13	€ 0.03	0.41%
4/14/2020	€ 6.21	€ 6.25	€ 0.04	0.66%
4/15/2020	€ 5.72	€ 5.72	€ 0.00	0.09%
4/16/2020	€ 5.74	€ 5.76	€ 0.02	0.33%
4/17/2020	€ 6.01	€ 6.02	€ 0.02	0.28%
4/20/2020	€ 5.83	€ 5.85	€ 0.02	0.38%
4/21/2020	€ 5.60	€ 5.63	€ 0.03	0.45%
4/22/2020	€ 5.64	€ 5.66	€ 0.03	0.46%
4/23/2020	€ 5.73	€ 5.75	€ 0.02	0.33%
4/24/2020	€ 5.50	€ 5.52	€ 0.02	0.36%
4/27/2020	€ 6.12	€ 6.20	€ 0.08	1.36%
4/28/2020	€ 6.33	€ 6.35	€ 0.01	0.21%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
4/29/2020	€ 7.06	€ 7.08	€ 0.02	0.28%
4/30/2020	€ 6.76	€ 6.78	€ 0.02	0.31%
5/4/2020	€ 6.47	€ 6.50	€ 0.03	0.42%
5/5/2020	€ 6.42	€ 6.47	€ 0.04	0.67%
5/6/2020	€ 6.31	€ 6.33	€ 0.02	0.33%
5/7/2020	€ 6.47	€ 6.49	€ 0.02	0.31%
5/8/2020	€ 6.56	€ 6.58	€ 0.02	0.30%
5/11/2020	€ 6.39	€ 6.47	€ 0.08	1.24%
5/12/2020	€ 6.40	€ 6.42	€ 0.01	0.23%
5/13/2020	€ 6.11	€ 6.13	€ 0.02	0.31%
5/14/2020	€ 6.15	€ 6.18	€ 0.03	0.47%
5/15/2020	€ 5.96	€ 5.99	€ 0.03	0.50%
5/18/2020	€ 6.51	€ 6.54	€ 0.02	0.35%
5/19/2020	€ 6.50	€ 6.51	€ 0.01	0.18%
5/20/2020	€ 6.81	€ 6.83	€ 0.01	0.21%
5/21/2020	€ 6.73	€ 6.76	€ 0.03	0.50%
5/22/2020	€ 6.70	€ 6.72	€ 0.02	0.33%
5/25/2020	€ 6.86	€ 6.88	€ 0.02	0.29%
5/26/2020	€ 7.47	€ 7.48	€ 0.01	0.19%
5/27/2020	€ 7.87	€ 7.89	€ 0.02	0.32%
5/28/2020	€ 7.67	€ 7.69	€ 0.02	0.31%
5/29/2020	€ 7.57	€ 7.58	€ 0.01	0.12%
6/1/2020	€ 7.74	€ 7.79	€ 0.05	0.64%
6/2/2020	€ 7.96	€ 7.98	€ 0.02	0.25%
6/3/2020	€ 8.15	€ 8.20	€ 0.05	0.57%
6/4/2020	€ 8.35	€ 8.37	€ 0.02	0.25%
6/5/2020	€ 8.58	€ 8.59	€ 0.02	0.17%
6/8/2020	€ 9.04	€ 9.04	€ 0.00	0.01%
6/9/2020	€ 8.66	€ 8.67	€ 0.01	0.12%
6/10/2020	€ 8.59	€ 8.61	€ 0.02	0.19%
6/11/2020	€ 7.93	€ 8.00	€ 0.07	0.89%
6/12/2020	€ 8.33	€ 8.35	€ 0.02	0.23%
6/15/2020	€ 8.35	€ 8.37	€ 0.02	0.28%
6/16/2020	€ 8.47	€ 8.49	€ 0.02	0.25%
6/17/2020	€ 8.33	€ 8.33	€ 0.00	0.02%
6/18/2020	€ 8.25	€ 8.26	€ 0.01	0.17%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
6/19/2020	€ 8.22	€ 8.23	€ 0.01	0.13%
6/22/2020	€ 8.29	€ 8.32	€ 0.02	0.25%
6/23/2020	€ 8.45	€ 8.46	€ 0.01	0.12%
6/24/2020	€ 8.10	€ 8.12	€ 0.02	0.25%
6/25/2020	€ 8.50	€ 8.52	€ 0.02	0.24%
6/26/2020	€ 8.01	€ 8.03	€ 0.02	0.24%
6/29/2020	€ 8.40	€ 8.41	€ 0.01	0.08%
6/30/2020	€ 8.46	€ 8.49	€ 0.03	0.29%
7/1/2020	€ 8.30	€ 8.30	€ 0.01	0.07%
7/2/2020	€ 8.49	€ 8.51	€ 0.02	0.24%
7/3/2020	€ 8.43	€ 8.45	€ 0.02	0.24%
7/6/2020	€ 8.79	€ 8.80	€ 0.01	0.14%
7/7/2020	€ 8.73	€ 8.74	€ 0.02	0.21%
7/8/2020	€ 8.80	€ 8.80	€ 0.00	0.02%
7/9/2020	€ 8.61	€ 8.64	€ 0.02	0.29%
7/10/2020	€ 8.92	€ 8.92	€ 0.00	0.02%
7/13/2020	€ 8.57	€ 8.59	€ 0.02	0.24%
7/14/2020	€ 8.78	€ 8.78	€ 0.00	0.03%
7/15/2020	€ 8.92	€ 8.93	€ 0.01	0.12%
7/16/2020	€ 8.82	€ 8.85	€ 0.03	0.35%
7/17/2020	€ 8.72	€ 8.74	€ 0.03	0.30%
7/20/2020	€ 8.88	€ 8.89	€ 0.01	0.08%
7/21/2020	€ 8.42	€ 8.45	€ 0.03	0.39%
7/22/2020	€ 8.50	€ 8.52	€ 0.02	0.21%
7/23/2020	€ 8.28	€ 8.31	€ 0.02	0.30%
7/24/2020	€ 8.24	€ 8.25	€ 0.02	0.21%
7/27/2020	€ 8.10	€ 8.11	€ 0.01	0.16%
7/28/2020	€ 8.06	€ 8.07	€ 0.01	0.07%
7/29/2020	€ 7.81	€ 7.82	€ 0.01	0.12%
7/30/2020	€ 7.60	€ 7.62	€ 0.02	0.24%
7/31/2020	€ 7.58	€ 7.60	€ 0.02	0.30%
8/3/2020	€ 7.82	€ 7.84	€ 0.01	0.18%
8/4/2020	€ 7.82	€ 7.85	€ 0.03	0.33%
8/5/2020	€ 7.88	€ 7.90	€ 0.03	0.33%
8/6/2020	€ 7.75	€ 7.77	€ 0.02	0.23%
8/7/2020	€ 7.80	€ 7.81	€ 0.01	0.09%

Exhibit 10C**Deutsche Bank AG (GR)****Bid Ask Spreads on the Xetra Exchange**

Source: Bloomberg

	DB	Xetra Sample	DB	Xetra Sample
	Spread (€)	Spread (€)	Spread (%)	Spread (%)
Average	€ 0.03	€ 0.22	0.26%	1.78%
Median	€ 0.02	€ 0.21	0.24%	1.52%

DB's Stock				
Date	Last Bid	Last Ask	Spread (€)	Spread (%)
8/10/2020	€ 8.00	€ 8.03	€ 0.03	0.32%
8/11/2020	€ 8.11	€ 8.16	€ 0.05	0.59%
8/12/2020	€ 8.24	€ 8.25	€ 0.01	0.11%
8/13/2020	€ 8.10	€ 8.11	€ 0.01	0.12%
8/14/2020	€ 8.03	€ 8.04	€ 0.01	0.09%
8/17/2020	€ 7.98	€ 8.01	€ 0.03	0.43%
8/18/2020	€ 7.87	€ 7.88	€ 0.02	0.24%
8/19/2020	€ 8.06	€ 8.07	€ 0.01	0.14%
8/20/2020	€ 7.88	€ 7.90	€ 0.03	0.33%
8/21/2020	€ 7.77	€ 7.79	€ 0.02	0.31%
8/24/2020	€ 8.12	€ 8.12	€ 0.00	0.04%
8/25/2020	€ 8.16	€ 8.17	€ 0.01	0.13%
8/26/2020	€ 8.27	€ 8.30	€ 0.02	0.30%
8/27/2020	€ 8.23	€ 8.25	€ 0.02	0.27%
8/28/2020	€ 8.30	€ 8.32	€ 0.02	0.23%
8/31/2020	€ 7.98	€ 7.99	€ 0.01	0.09%
9/1/2020	€ 7.98	€ 8.00	€ 0.03	0.31%
9/2/2020	€ 7.95	€ 7.99	€ 0.04	0.46%
9/3/2020	€ 7.82	€ 7.86	€ 0.03	0.43%
9/4/2020	€ 8.22	€ 8.22	€ 0.01	0.06%
9/7/2020	€ 8.11	€ 8.16	€ 0.05	0.57%
9/8/2020	€ 7.97	€ 7.98	€ 0.02	0.20%
9/9/2020	€ 7.97	€ 7.99	€ 0.02	0.23%
9/10/2020	€ 7.91	€ 7.93	€ 0.02	0.27%
9/11/2020	€ 7.82	€ 7.84	€ 0.02	0.27%
9/14/2020	€ 7.86	€ 7.88	€ 0.02	0.25%
9/15/2020	€ 7.69	€ 7.70	€ 0.01	0.12%
9/16/2020	€ 7.75	€ 7.79	€ 0.04	0.49%
9/17/2020	€ 7.78	€ 7.81	€ 0.03	0.41%
9/18/2020	€ 7.67	€ 7.70	€ 0.03	0.40%

Exhibit 10D**Deutsche Bank AG (GR)****Companies Used for Bid Ask Spread Analysis on the Xetra Exchange**

Bloomberg Symbol	Company
1U1 GR Equity	1&1 AG
TGT GR Equity	11 88 0 SOLUTIONS AG
UUU GR Equity	3U HOLDING AG
A4Y GR Equity	ACCENTRO REAL ESTATE AG
ADS GR Equity	ADIDAS AG
AIXA GR Equity	AIXTRON SE
AT1 GR Equity	AROUNDTOWN SA
NDA GR Equity	AURUBIS AG
BWB GR Equity	BAADER BANK AG
BSL GR Equity	BASLER AG
TINC GR Equity	BAUMOT GROUP AG
BAYN GR Equity	BAYER AG-REG
BC8 GR Equity	BECHTLE AG
BEZ GR Equity	BERENTZEN-GRUPPE AG
BDT GR Equity	BERTRANDT AG
BIJ GR Equity	BIJOU BRIGITTE MODI ACCESS
BVB GR Equity	BORUSSIA DORTMUND GMBH & CO
BNR GR Equity	BRENNTAG SE
CSH GR Equity	CENIT AG
CWC GR Equity	CEWE STIFTUNG & CO KGAA
EVD GR Equity	CTS EVENTIM AG & CO KGAA
DLX GR Equity	DELIGNIT AG
DEQ GR Equity	DEUTSCHE EUROSHOP AG
DGR GR Equity	DEUTSCHE GRUNDSTUECKSAUKTION
DTE GR Equity	DEUTSCHE TELEKOM AG-REG
DLG GR Equity	DIALOG SEMICONDUCTOR LTD
HNL GR Equity	DR HOENLE AG
DUE GR Equity	DUERR AG
EUZ GR Equity	ECKERT & ZIEGLER STRAHLEN UN
ED4 GR Equity	EDAG ENGINEERING GROUP AG
EDL GR Equity	EDEL SE & CO KGAA
ELG GR Equity	ELMOS SEMICONDUCTOR SE
EVT GR Equity	EVOTEC SE
EXC GR Equity	EXCEET GROUP SE
FNTN GR Equity	FREENET AG
FME GR Equity	FRESENIUS MEDICAL CARE AG &
G1A GR Equity	GEA GROUP AG
GSC1 GR Equity	GESCO AG
GGG GR Equity	GIGASET AG
2HRA GR Equity	H&R GMBH & CO KGAA
HAEK GR Equity	HAEMATO AG
HHFA GR Equity	HAMBURGER HAFEN UND LOGISTIK

Exhibit 10D**Deutsche Bank AG (GR)****Companies Used for Bid Ask Spread Analysis on the Xetra Exchange**

Bloomberg Symbol	Company
H5E GR Equity	HELMA EIGENHEIMBAU AG
HMU GR Equity	HMS BERGBAU AG
HBM GR Equity	HORNBACH BAUMARKT AG
HBH GR Equity	HORNBACH HOLDING AG & CO KGA
IC8 GR Equity	INCITY IMMOBILIEN AG
IS7 GR Equity	INTICA SYSTEMS AG
IVU GR Equity	IVU TRAFFIC TECHNOLOGIES AG
JDC GR Equity	JDC GROUP AG
SDF GR Equity	K+S AG-REG
KCO GR Equity	KLOECKNER & CO SE
KRN GR Equity	KRONES AG
KU2 GR Equity	KUKA AG
LXS GR Equity	LANXESS AG
IFA GR Equity	LS INVEST AG
MED GR Equity	MEDICLIN AG
MDG1 GR Equity	MEDIGENE AG
M3V GR Equity	MEVIS MEDICAL SOLUTIONS AG
MUB GR Equity	MUEHLBAUER HOLDING AG
M4N GR Equity	MUEHLHAN AG
MUV2 GR Equity	MUENCHENER RUECKVER AG-REG
MVV1 GR Equity	MVV ENERGIE AG
MWB GR Equity	MWB FAIRTRADE WERTPAPIERHAND
MYRK GR Equity	MYHAMMER HOLDING AG
NTG GR Equity	NABALTEC AG
NN6 GR Equity	NANOREPRO AG
NEM GR Equity	NEMETSCHEK SE
NOEJ GR Equity	NORMA GROUP SE
M7U GR Equity	NYNOMIC AG
PA8 GR Equity	PAION AG
P4O GR Equity	PLAN OPTIK AG
PSM GR Equity	PROSIEBENSAT.1 MEDIA SE
PUM GR Equity	PUMA SE
TPE GR Equity	PVA TEPLA AG
RHK GR Equity	RHOEN-KLINIKUM AG
RIB GR Equity	RIB SOFTWARE SE
SAP GR Equity	SAP SE
PZS GR Equity	SCHERZER & CO AG
SCE GR Equity	SCHWEIZER ELECTRONIC AG
YSN GR Equity	SECUNET SECURITY NETWORKS AG
F3C GR Equity	SFC ENERGY AG-BR
WAF GR Equity	SILTRONIC AG
LNSX GR Equity	SIXT LEASING SE

Exhibit 10D**Deutsche Bank AG (GR)****Companies Used for Bid Ask Spread Analysis on the Xetra Exchange**

Bloomberg Symbol	Company
BTBB GR Equity	SLEEPZ AG
SHF GR Equity	SNP SCHNEIDER-NEUREITHER & P
SFD1 GR Equity	SOFTLINE AG
SPM GR Equity	SPLENDID MEDIEN AG
SYZ GR Equity	SYZYGY AG
O2D GR Equity	TELEFONICA DEUTSCHLAND HOLDI
TUI1 GR Equity	TUI AG
UTDI GR Equity	UNITED INTERNET AG-REG SHARE
ULC GR Equity	UNITED LABELS AG
OSP2 GR Equity	USU SOFTWARE AG
V3S GR Equity	VECTRON SYSTEMS AG
V6C GR Equity	VISCOM AG
V3V GR Equity	VITA 34 AG
VNA GR Equity	VONOVIA SE
WCH GR Equity	WACKER CHEMIE AG
WAC GR Equity	WACKER NEUSON SE

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
3/14/2017	3/14/2016	3/13/2017	248	0.6440	0.6411	0.0182	1.944	-0.10%	2.677	15.35	1.669	14.40
3/15/2017	3/15/2016	3/14/2017	248	0.6454	0.6425	0.0182	1.939	-0.10%	2.680	15.40	1.676	14.45
3/16/2017	3/16/2016	3/15/2017	248	0.6453	0.6424	0.0181	1.944	-0.11%	2.669	15.35	1.677	14.49
3/17/2017	3/17/2016	3/16/2017	248	0.6445	0.6416	0.0181	1.951	-0.09%	2.674	15.43	1.663	14.36
3/20/2017	3/20/2016	3/19/2017	247	0.6481	0.6452	0.0181	1.964	-0.09%	2.729	15.66	1.673	14.30
3/21/2017	3/21/2016	3/20/2017	248	0.6493	0.6464	0.0181	1.960	-0.10%	2.734	15.70	1.678	14.38
3/22/2017	3/22/2016	3/21/2017	248	0.6241	0.6210	0.0188	1.918	-0.07%	2.686	14.90	1.643	13.59
3/23/2017	3/23/2016	3/22/2017	248	0.6235	0.6204	0.0188	1.987	-0.06%	2.684	14.89	1.642	13.56
3/24/2017	3/24/2016	3/23/2017	248	0.6217	0.6186	0.0187	1.991	-0.06%	2.671	14.78	1.642	13.57
3/27/2017	3/27/2016	3/26/2017	248	0.6211	0.6180	0.0187	1.990	-0.05%	2.665	14.74	1.642	13.58
3/28/2017	3/28/2016	3/27/2017	249	0.6210	0.6179	0.0187	1.991	-0.05%	2.664	14.76	1.643	13.61
3/29/2017	3/29/2016	3/28/2017	249	0.6220	0.6189	0.0187	1.991	-0.05%	2.669	14.82	1.644	13.61
3/30/2017	3/30/2016	3/29/2017	249	0.6213	0.6182	0.0187	1.980	-0.04%	2.677	14.84	1.643	13.54
3/31/2017	3/31/2016	3/30/2017	249	0.6211	0.6180	0.0187	1.988	-0.02%	2.719	15.01	1.622	13.34
4/3/2017	4/3/2016	4/2/2017	248	0.6205	0.6174	0.0187	1.999	-0.03%	2.727	15.00	1.619	13.25
4/4/2017	4/4/2016	4/3/2017	249	0.6205	0.6174	0.0187	2.001	-0.04%	2.733	15.04	1.620	13.27
4/5/2017	4/5/2016	4/4/2017	249	0.6200	0.6169	0.0187	2.007	-0.03%	2.733	15.04	1.617	13.23
4/6/2017	4/6/2016	4/5/2017	249	0.6163	0.6132	0.0187	2.007	-0.03%	2.719	14.83	1.615	13.23
4/7/2017	4/7/2016	4/6/2017	249	0.6160	0.6129	0.0187	2.007	-0.02%	2.727	14.83	1.616	13.22
4/10/2017	4/10/2016	4/9/2017	248	0.6118	0.6086	0.0187	2.003	-0.02%	2.701	14.60	1.619	13.15
4/11/2017	4/11/2016	4/10/2017	249	0.6116	0.6084	0.0187	2.002	-0.02%	2.701	14.63	1.618	13.16
4/12/2017	4/12/2016	4/11/2017	249	0.6123	0.6092	0.0187	2.006	-0.02%	2.701	14.64	1.624	13.20
4/13/2017	4/13/2016	4/12/2017	249	0.6143	0.6112	0.0187	2.005	-0.02%	2.711	14.71	1.626	13.25
4/17/2017	4/17/2016	4/16/2017	247	0.6058	0.6026	0.0187	1.996	-0.03%	2.656	14.31	1.622	13.05
4/18/2017	4/18/2016	4/17/2017	248	0.6060	0.6027	0.0186	1.996	-0.04%	2.655	14.36	1.621	13.06
4/19/2017	4/19/2016	4/18/2017	248	0.6056	0.6024	0.0186	1.993	-0.04%	2.649	14.35	1.619	13.05
4/20/2017	4/20/2016	4/19/2017	248	0.6058	0.6026	0.0186	1.983	-0.03%	2.667	14.38	1.616	13.03
4/21/2017	4/21/2016	4/20/2017	248	0.6039	0.6007	0.0186	1.987	-0.04%	2.670	14.44	1.604	12.85
4/24/2017	4/24/2016	4/23/2017	247	0.6034	0.6002	0.0186	1.978	-0.05%	2.676	14.43	1.602	12.77
4/25/2017	4/25/2016	4/24/2017	248	0.6159	0.6127	0.0188	1.947	-0.03%	2.783	15.02	1.632	12.93
4/26/2017	4/26/2016	4/25/2017	248	0.6152	0.6121	0.0188	1.983	-0.02%	2.770	15.01	1.625	12.90
4/27/2017	4/27/2016	4/26/2017	248	0.6125	0.6093	0.0188	1.983	-0.02%	2.767	14.95	1.620	12.80
4/28/2017	4/28/2016	4/27/2017	247	0.6135	0.6103	0.0188	1.982	-0.03%	2.768	14.95	1.619	12.79
5/1/2017	5/1/2016	4/30/2017	247	0.6123	0.6091	0.0188	1.977	-0.02%	2.761	14.91	1.616	12.77
5/2/2017	5/2/2016	5/1/2017	248	0.6123	0.6092	0.0188	1.977	-0.02%	2.762	14.94	1.616	12.80
5/3/2017	5/3/2016	5/2/2017	248	0.6162	0.6130	0.0187	2.000	-0.01%	2.769	15.08	1.616	12.88
5/4/2017	5/4/2016	5/3/2017	248	0.6106	0.6074	0.0186	1.992	0.02%	2.731	14.82	1.609	12.83
5/5/2017	5/5/2016	5/4/2017	248	0.6124	0.6092	0.0186	1.986	0.01%	2.747	14.87	1.611	12.88
5/8/2017	5/8/2016	5/7/2017	247	0.6098	0.6066	0.0187	1.974	0.02%	2.748	14.82	1.596	12.72
5/9/2017	5/9/2016	5/8/2017	248	0.6099	0.6067	0.0187	1.988	0.02%	2.748	14.85	1.598	12.76
5/10/2017	5/10/2016	5/9/2017	248	0.6098	0.6066	0.0187	1.987	0.02%	2.749	14.85	1.599	12.74
5/11/2017	5/11/2016	5/10/2017	248	0.6088	0.6056	0.0187	1.985	0.02%	2.757	14.80	1.598	12.74
5/12/2017	5/12/2016	5/11/2017	248	0.6083	0.6051	0.0186	1.986	0.03%	2.751	14.76	1.598	12.75

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
5/15/2017	5/15/2016	5/14/2017	247	0.6080	0.6048	0.0187	1.984	0.02%	2.760	14.72	1.598	12.72
5/16/2017	5/16/2016	5/15/2017	248	0.6080	0.6048	0.0186	1.984	0.02%	2.761	14.76	1.596	12.73
5/17/2017	5/17/2016	5/16/2017	248	0.6084	0.6052	0.0186	1.984	0.03%	2.778	14.82	1.593	12.69
5/18/2017	5/18/2016	5/17/2017	248	0.6082	0.6050	0.0187	1.980	0.03%	2.776	14.88	1.581	12.61
5/19/2017	5/19/2016	5/18/2017	248	0.6077	0.6045	0.0186	1.988	0.02%	2.778	14.92	1.612	12.52
5/22/2017	5/22/2016	5/21/2017	247	0.6093	0.6061	0.0187	1.990	0.02%	2.817	15.05	1.611	12.42
5/23/2017	5/23/2016	5/22/2017	248	0.6093	0.6061	0.0186	1.990	0.01%	2.812	15.06	1.609	12.45
5/24/2017	5/24/2016	5/23/2017	248	0.6090	0.6058	0.0187	1.989	0.01%	2.815	15.07	1.606	12.44
5/25/2017	5/25/2016	5/24/2017	248	0.6078	0.6046	0.0187	1.985	0.01%	2.822	15.00	1.608	12.44
5/26/2017	5/26/2016	5/25/2017	248	0.6058	0.6025	0.0187	1.985	0.00%	2.808	14.88	1.607	12.45
5/30/2017	5/30/2016	5/29/2017	247	0.6064	0.6032	0.0187	1.984	-0.01%	2.812	14.87	1.615	12.45
5/31/2017	5/31/2016	5/30/2017	248	0.6074	0.6042	0.0187	1.983	-0.02%	2.816	14.91	1.619	12.52
6/1/2017	6/1/2016	5/31/2017	248	0.6083	0.6051	0.0187	1.983	-0.02%	2.813	14.90	1.621	12.59
6/2/2017	6/2/2016	6/1/2017	248	0.6087	0.6055	0.0187	1.985	-0.02%	2.808	14.90	1.623	12.61
6/5/2017	6/5/2016	6/4/2017	247	0.6074	0.6041	0.0187	1.986	-0.01%	2.806	14.89	1.624	12.48
6/6/2017	6/6/2016	6/5/2017	248	0.6073	0.6041	0.0187	1.987	-0.02%	2.807	14.92	1.623	12.50
6/7/2017	6/7/2016	6/6/2017	248	0.6072	0.6040	0.0187	1.983	-0.01%	2.811	14.93	1.621	12.48
6/8/2017	6/8/2016	6/7/2017	248	0.6074	0.6041	0.0187	1.979	-0.01%	2.813	14.93	1.622	12.49
6/9/2017	6/9/2016	6/8/2017	248	0.6074	0.6042	0.0187	1.978	0.00%	2.816	14.96	1.615	12.46
6/12/2017	6/12/2016	6/11/2017	247	0.5989	0.5957	0.0187	1.972	0.02%	2.785	14.55	1.598	12.36
6/13/2017	6/13/2016	6/12/2017	248	0.5991	0.5958	0.0187	1.970	0.01%	2.788	14.59	1.598	12.38
6/14/2017	6/14/2016	6/13/2017	248	0.5970	0.5937	0.0187	1.971	0.01%	2.780	14.46	1.600	12.41
6/15/2017	6/15/2016	6/14/2017	248	0.5953	0.5920	0.0187	1.972	0.01%	2.775	14.36	1.601	12.42
6/16/2017	6/16/2016	6/15/2017	248	0.5959	0.5926	0.0187	1.967	0.00%	2.785	14.43	1.598	12.37
6/19/2017	6/19/2016	6/18/2017	247	0.5938	0.5905	0.0187	1.977	-0.02%	2.774	14.36	1.588	12.27
6/20/2017	6/20/2016	6/19/2017	248	0.5948	0.5915	0.0187	1.977	-0.02%	2.778	14.44	1.588	12.30
6/21/2017	6/21/2016	6/20/2017	248	0.5943	0.5910	0.0186	1.987	-0.02%	2.787	14.35	1.603	12.37
6/22/2017	6/22/2016	6/21/2017	248	0.5929	0.5895	0.0186	1.989	-0.02%	2.780	14.32	1.597	12.32
6/23/2017	6/23/2016	6/22/2017	248	0.5932	0.5898	0.0186	1.991	-0.03%	2.780	14.32	1.597	12.33
6/26/2017	6/26/2016	6/25/2017	247	0.5138	0.5098	0.0187	1.975	0.00%	2.450	10.63	1.588	12.04
6/27/2017	6/27/2016	6/26/2017	248	0.5142	0.5102	0.0186	1.975	0.00%	2.451	10.65	1.589	12.07
6/28/2017	6/28/2016	6/27/2017	248	0.5122	0.5082	0.0185	1.949	0.03%	2.396	10.03	1.641	12.52
6/29/2017	6/29/2016	6/28/2017	248	0.5173	0.5134	0.0184	1.971	0.03%	2.460	10.15	1.646	12.63
6/30/2017	6/30/2016	6/29/2017	248	0.5318	0.5280	0.0182	2.033	0.05%	2.669	10.78	1.604	12.73
7/3/2017	7/3/2016	7/2/2017	247	0.5455	0.5418	0.0179	2.045	0.06%	2.791	11.30	1.603	12.85
7/5/2017	7/5/2016	7/4/2017	248	0.5459	0.5422	0.0179	2.042	0.07%	2.795	11.34	1.598	12.88
7/6/2017	7/6/2016	7/5/2017	248	0.5440	0.5403	0.0179	2.013	0.09%	2.768	11.14	1.625	12.97
7/7/2017	7/7/2016	7/6/2017	248	0.5467	0.5430	0.0177	2.035	0.11%	2.714	11.02	1.644	13.19
7/10/2017	7/10/2016	7/9/2017	247	0.5479	0.5442	0.0177	2.056	0.13%	2.728	11.01	1.640	13.21
7/11/2017	7/11/2016	7/10/2017	248	0.5480	0.5443	0.0176	2.056	0.12%	2.725	11.02	1.641	13.25
7/12/2017	7/12/2016	7/11/2017	248	0.5454	0.5417	0.0177	2.051	0.12%	2.721	10.93	1.637	13.21
7/13/2017	7/13/2016	7/12/2017	248	0.5382	0.5345	0.0176	2.058	0.10%	2.598	10.45	1.638	13.28
7/14/2017	7/14/2016	7/13/2017	248	0.5377	0.5339	0.0176	2.057	0.11%	2.604	10.47	1.636	13.24

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
7/17/2017	7/17/2016	7/16/2017	247	0.5333	0.5294	0.0177	2.057	0.09%	2.556	10.26	1.625	13.17
7/18/2017	7/18/2016	7/17/2017	248	0.5332	0.5293	0.0176	2.056	0.09%	2.557	10.28	1.623	13.19
7/19/2017	7/19/2016	7/18/2017	248	0.5334	0.5296	0.0177	2.048	0.08%	2.556	10.27	1.626	13.21
7/20/2017	7/20/2016	7/19/2017	248	0.5344	0.5306	0.0176	2.050	0.09%	2.520	10.19	1.630	13.32
7/21/2017	7/21/2016	7/20/2017	248	0.5335	0.5297	0.0176	2.052	0.09%	2.513	10.14	1.628	13.32
7/24/2017	7/24/2016	7/23/2017	247	0.5364	0.5326	0.0175	2.049	0.08%	2.522	10.19	1.632	13.36
7/25/2017	7/25/2016	7/24/2017	248	0.5365	0.5327	0.0175	2.047	0.09%	2.507	10.14	1.638	13.44
7/26/2017	7/26/2016	7/25/2017	248	0.5369	0.5332	0.0175	2.043	0.10%	2.516	10.17	1.631	13.44
7/27/2017	7/27/2016	7/26/2017	248	0.5385	0.5347	0.0175	2.059	0.10%	2.518	10.21	1.630	13.48
7/28/2017	7/28/2016	7/27/2017	248	0.5385	0.5347	0.0175	2.059	0.10%	2.518	10.21	1.630	13.48
7/31/2017	7/31/2016	7/30/2017	247	0.5374	0.5336	0.0175	2.056	0.12%	2.526	10.18	1.625	13.41
8/1/2017	8/1/2016	7/31/2017	248	0.5332	0.5294	0.0176	2.054	0.11%	2.526	10.15	1.618	13.30
8/2/2017	8/2/2016	8/1/2017	248	0.5311	0.5273	0.0176	2.059	0.12%	2.516	10.11	1.613	13.24
8/3/2017	8/3/2016	8/2/2017	248	0.5280	0.5241	0.0175	2.062	0.13%	2.484	9.95	1.610	13.23
8/4/2017	8/4/2016	8/3/2017	248	0.5321	0.5283	0.0175	2.075	0.13%	2.489	10.01	1.641	13.36
8/7/2017	8/7/2016	8/6/2017	247	0.5302	0.5263	0.0175	2.072	0.13%	2.469	9.89	1.650	13.32
8/8/2017	8/8/2016	8/7/2017	248	0.5300	0.5261	0.0175	2.071	0.13%	2.465	9.90	1.651	13.35
8/9/2017	8/9/2016	8/8/2017	248	0.5307	0.5269	0.0174	2.077	0.12%	2.465	9.92	1.650	13.37
8/10/2017	8/10/2016	8/9/2017	248	0.5318	0.5280	0.0174	2.064	0.11%	2.471	9.93	1.655	13.40
8/11/2017	8/11/2016	8/10/2017	248	0.5475	0.5438	0.0172	2.086	0.08%	2.513	10.39	1.671	13.73
8/14/2017	8/14/2016	8/13/2017	247	0.5446	0.5408	0.0173	2.080	0.09%	2.518	10.34	1.663	13.60
8/15/2017	8/15/2016	8/14/2017	248	0.5446	0.5409	0.0172	2.092	0.09%	2.510	10.37	1.663	13.62
8/16/2017	8/16/2016	8/15/2017	248	0.5444	0.5407	0.0172	2.089	0.09%	2.512	10.38	1.662	13.60
8/17/2017	8/17/2016	8/16/2017	248	0.5449	0.5411	0.0172	2.092	0.08%	2.510	10.35	1.665	13.64
8/18/2017	8/18/2016	8/17/2017	248	0.5495	0.5458	0.0172	2.098	0.08%	2.535	10.57	1.664	13.68
8/21/2017	8/21/2016	8/20/2017	247	0.5496	0.5459	0.0172	2.102	0.10%	2.515	10.50	1.663	13.69
8/22/2017	8/22/2016	8/21/2017	248	0.5503	0.5466	0.0172	2.101	0.09%	2.513	10.50	1.667	13.77
8/23/2017	8/23/2016	8/22/2017	248	0.5500	0.5464	0.0172	2.089	0.09%	2.501	10.49	1.668	13.77
8/24/2017	8/24/2016	8/23/2017	248	0.5506	0.5469	0.0171	2.102	0.08%	2.486	10.46	1.666	13.81
8/25/2017	8/25/2016	8/24/2017	248	0.5505	0.5468	0.0171	2.098	0.07%	2.506	10.53	1.663	13.75
8/28/2017	8/28/2016	8/27/2017	247	0.5518	0.5481	0.0171	2.106	0.08%	2.502	10.51	1.668	13.78
8/29/2017	8/29/2016	8/28/2017	248	0.5518	0.5481	0.0171	2.106	0.07%	2.502	10.53	1.667	13.81
8/30/2017	8/30/2016	8/29/2017	248	0.5532	0.5495	0.0171	2.101	0.07%	2.506	10.54	1.674	13.86
8/31/2017	8/31/2016	8/30/2017	248	0.5506	0.5469	0.0170	2.102	0.05%	2.516	10.59	1.665	13.71
9/1/2017	9/1/2016	8/31/2017	248	0.5507	0.5470	0.0170	2.103	0.03%	2.514	10.62	1.659	13.69
9/5/2017	9/5/2016	9/4/2017	247	0.5502	0.5466	0.0171	2.100	0.03%	2.519	10.59	1.658	13.65
9/6/2017	9/6/2016	9/5/2017	248	0.5507	0.5471	0.0170	2.098	0.03%	2.532	10.69	1.645	13.64
9/7/2017	9/7/2016	9/6/2017	248	0.5494	0.5457	0.0170	2.090	0.05%	2.591	10.91	1.630	13.41
9/8/2017	9/8/2016	9/7/2017	248	0.5487	0.5450	0.0171	2.086	0.05%	2.586	10.88	1.620	13.40
9/11/2017	9/11/2016	9/10/2017	247	0.5613	0.5577	0.0168	2.070	-0.02%	2.988	12.18	1.553	12.80
9/12/2017	9/12/2016	9/11/2017	248	0.5620	0.5584	0.0168	2.069	-0.02%	2.979	12.25	1.553	12.81
9/13/2017	9/13/2016	9/12/2017	248	0.5671	0.5636	0.0167	2.077	0.00%	3.015	12.41	1.557	12.92
9/14/2017	9/14/2016	9/13/2017	248	0.5626	0.5590	0.0168	2.080	-0.01%	3.024	12.22	1.554	12.88

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
9/15/2017	9/15/2016	9/14/2017	248	0.5626	0.5590	0.0168	2.083	-0.01%	3.024	12.22	1.554	12.88
9/18/2017	9/18/2016	9/17/2017	247	0.5599	0.5563	0.0163	2.126	0.03%	2.929	12.04	1.520	12.87
9/19/2017	9/19/2016	9/18/2017	248	0.5581	0.5544	0.0163	2.117	0.03%	2.928	12.03	1.512	12.83
9/20/2017	9/20/2016	9/19/2017	248	0.5638	0.5603	0.0162	2.162	0.04%	2.956	12.26	1.505	12.90
9/21/2017	9/21/2016	9/20/2017	248	0.5702	0.5667	0.0160	2.195	0.05%	2.948	12.40	1.507	13.09
9/22/2017	9/22/2016	9/21/2017	248	0.5688	0.5653	0.0160	2.195	0.07%	2.942	12.24	1.514	13.17
9/25/2017	9/25/2016	9/24/2017	247	0.5680	0.5644	0.0160	2.188	0.07%	2.954	12.08	1.529	13.22
9/26/2017	9/26/2016	9/25/2017	248	0.5704	0.5669	0.0160	2.182	0.05%	2.976	12.19	1.535	13.29
9/27/2017	9/27/2016	9/26/2017	248	0.5613	0.5577	0.0158	2.212	0.08%	2.870	11.75	1.520	13.24
9/28/2017	9/28/2016	9/27/2017	248	0.5645	0.5610	0.0158	2.199	0.09%	2.884	11.81	1.526	13.35
9/29/2017	9/29/2016	9/28/2017	248	0.5643	0.5607	0.0158	2.153	0.09%	2.876	11.78	1.525	13.36
10/2/2017	10/2/2016	10/1/2017	247	0.5745	0.5710	0.0143	2.035	0.07%	2.738	12.39	1.390	13.26
10/3/2017	10/3/2016	10/2/2017	248	0.5717	0.5682	0.0143	2.039	0.07%	2.732	12.34	1.387	13.22
10/4/2017	10/4/2016	10/3/2017	248	0.5704	0.5669	0.0143	2.031	0.06%	2.726	12.30	1.386	13.19
10/5/2017	10/5/2016	10/4/2017	248	0.5706	0.5671	0.0143	2.029	0.04%	2.755	12.43	1.378	13.08
10/6/2017	10/6/2016	10/5/2017	248	0.5714	0.5679	0.0143	2.034	0.04%	2.759	12.45	1.387	13.10
10/9/2017	10/9/2016	10/8/2017	247	0.5724	0.5689	0.0143	2.034	0.04%	2.775	12.49	1.387	13.07
10/10/2017	10/10/2016	10/9/2017	248	0.5733	0.5698	0.0143	2.034	0.03%	2.780	12.52	1.390	13.13
10/11/2017	10/11/2016	10/10/2017	248	0.5735	0.5700	0.0143	2.036	0.02%	2.770	12.50	1.393	13.16
10/12/2017	10/12/2016	10/11/2017	248	0.5719	0.5684	0.0143	2.038	0.01%	2.798	12.41	1.391	13.16
10/13/2017	10/13/2016	10/12/2017	248	0.5726	0.5691	0.0143	2.037	0.01%	2.807	12.44	1.387	13.18
10/16/2017	10/16/2016	10/15/2017	247	0.5709	0.5673	0.0143	2.038	0.01%	2.795	12.32	1.389	13.15
10/17/2017	10/17/2016	10/16/2017	248	0.5709	0.5674	0.0143	2.038	0.01%	2.795	12.34	1.388	13.18
10/18/2017	10/18/2016	10/17/2017	248	0.5708	0.5673	0.0143	2.039	0.01%	2.801	12.35	1.387	13.17
10/19/2017	10/19/2016	10/18/2017	248	0.5692	0.5657	0.0143	2.038	0.01%	2.797	12.25	1.387	13.18
10/20/2017	10/20/2016	10/19/2017	248	0.5691	0.5656	0.0143	2.014	0.01%	2.796	12.24	1.388	13.18
10/23/2017	10/23/2016	10/22/2017	247	0.5725	0.5690	0.0142	2.022	-0.01%	2.821	12.42	1.372	13.13
10/24/2017	10/24/2016	10/23/2017	248	0.5729	0.5694	0.0142	2.017	-0.02%	2.832	12.49	1.372	13.14
10/25/2017	10/25/2016	10/24/2017	248	0.5736	0.5701	0.0143	2.020	-0.01%	2.830	12.44	1.381	13.22
10/26/2017	10/26/2016	10/25/2017	248	0.5737	0.5702	0.0142	2.015	0.00%	2.815	12.40	1.383	13.27
10/27/2017	10/27/2016	10/26/2017	247	0.5744	0.5709	0.0142	2.025	-0.01%	2.823	12.44	1.379	13.22
10/30/2017	10/30/2016	10/29/2017	247	0.5726	0.5690	0.0143	2.012	-0.03%	2.801	12.29	1.389	13.26
10/31/2017	10/31/2016	10/30/2017	248	0.5726	0.5691	0.0143	2.028	-0.03%	2.802	12.31	1.388	13.29
11/1/2017	11/1/2016	10/31/2017	248	0.5710	0.5675	0.0143	2.018	-0.03%	2.799	12.29	1.382	13.23
11/2/2017	11/2/2016	11/1/2017	248	0.5708	0.5673	0.0142	2.023	-0.01%	2.778	12.21	1.384	13.29
11/3/2017	11/3/2016	11/2/2017	248	0.5684	0.5649	0.0143	2.009	0.00%	2.769	12.05	1.390	13.32
11/6/2017	11/6/2016	11/5/2017	247	0.5685	0.5650	0.0143	2.021	-0.01%	2.780	12.00	1.392	13.33
11/7/2017	11/7/2016	11/6/2017	248	0.5680	0.5645	0.0143	2.022	-0.01%	2.780	12.01	1.389	13.33
11/8/2017	11/8/2016	11/7/2017	248	0.5558	0.5521	0.0143	2.014	-0.01%	2.722	11.42	1.379	13.27
11/9/2017	11/9/2016	11/8/2017	248	0.5501	0.5464	0.0144	1.985	0.00%	2.734	11.37	1.365	13.05
11/10/2017	11/10/2016	11/9/2017	248	0.5429	0.5392	0.0145	1.955	0.00%	2.674	11.10	1.398	12.95
11/13/2017	11/13/2016	11/12/2017	247	0.5275	0.5237	0.0145	1.909	-0.02%	2.657	11.00	1.376	12.30
11/14/2017	11/14/2016	11/13/2017	248	0.5274	0.5235	0.0145	1.921	-0.02%	2.652	11.02	1.377	12.33

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
11/15/2017	11/15/2016	11/14/2017	248	0.5235	0.5196	0.0145	1.917	-0.03%	2.672	11.07	1.411	12.10
11/16/2017	11/16/2016	11/15/2017	248	0.5256	0.5217	0.0145	1.920	-0.01%	2.649	11.01	1.413	12.25
11/17/2017	11/17/2016	11/16/2017	248	0.5186	0.5147	0.0146	1.900	0.01%	2.651	11.00	1.400	11.95
11/20/2017	11/20/2016	11/19/2017	247	0.5190	0.5151	0.0146	1.907	0.01%	2.667	10.98	1.402	11.95
11/21/2017	11/21/2016	11/20/2017	248	0.5188	0.5148	0.0145	1.910	0.01%	2.667	11.00	1.401	11.96
11/22/2017	11/22/2016	11/21/2017	248	0.5180	0.5141	0.0146	1.905	0.01%	2.661	10.92	1.405	12.00
11/24/2017	11/24/2016	11/23/2017	247	0.5207	0.5167	0.0145	1.917	0.01%	2.659	10.92	1.415	12.07
11/27/2017	11/27/2016	11/26/2017	247	0.5210	0.5171	0.0146	1.925	0.02%	2.694	11.03	1.406	11.99
11/28/2017	11/28/2016	11/27/2017	248	0.5216	0.5177	0.0146	1.931	0.01%	2.708	11.09	1.408	12.00
11/29/2017	11/29/2016	11/28/2017	248	0.5044	0.5004	0.0147	1.881	0.02%	2.657	10.77	1.358	11.55
11/30/2017	11/30/2016	11/29/2017	248	0.5029	0.4989	0.0147	1.882	0.02%	2.650	10.76	1.342	11.49
12/1/2017	12/1/2016	11/30/2017	248	0.5012	0.4971	0.0147	1.876	0.00%	2.639	10.73	1.359	11.45
12/4/2017	12/4/2016	12/3/2017	247	0.4979	0.4938	0.0147	1.863	0.01%	2.631	10.69	1.362	11.30
12/5/2017	12/5/2016	12/4/2017	248	0.4960	0.4919	0.0147	1.864	0.01%	2.630	10.69	1.347	11.26
12/6/2017	12/6/2016	12/5/2017	248	0.4894	0.4852	0.0146	1.868	-0.01%	2.584	10.56	1.325	11.10
12/7/2017	12/7/2016	12/6/2017	248	0.4811	0.4769	0.0141	1.905	-0.04%	2.475	10.49	1.255	10.82
12/8/2017	12/8/2016	12/7/2017	248	0.4790	0.4748	0.0141	1.900	-0.03%	2.515	10.44	1.252	10.78
12/11/2017	12/11/2016	12/10/2017	247	0.4888	0.4846	0.0139	1.841	-0.02%	2.579	10.87	1.230	10.73
12/12/2017	12/12/2016	12/11/2017	248	0.4882	0.4840	0.0139	1.842	-0.02%	2.567	10.84	1.232	10.77
12/13/2017	12/13/2016	12/12/2017	248	0.4929	0.4888	0.0138	1.854	-0.02%	2.567	10.90	1.254	10.93
12/14/2017	12/14/2016	12/13/2017	248	0.4915	0.4874	0.0138	1.855	-0.02%	2.569	10.82	1.254	10.94
12/15/2017	12/15/2016	12/14/2017	248	0.4938	0.4897	0.0138	1.859	-0.03%	2.595	10.91	1.253	10.95
12/18/2017	12/18/2016	12/17/2017	247	0.4968	0.4926	0.0138	1.800	-0.04%	2.646	11.10	1.266	10.84
12/19/2017	12/19/2016	12/18/2017	248	0.5000	0.4960	0.0138	1.796	-0.04%	2.674	11.32	1.262	10.81
12/20/2017	12/20/2016	12/19/2017	248	0.5062	0.5022	0.0136	1.768	-0.03%	2.698	11.62	1.243	10.78
12/21/2017	12/21/2016	12/20/2017	248	0.5062	0.5022	0.0135	1.760	-0.04%	2.692	11.69	1.227	10.70
12/22/2017	12/22/2016	12/21/2017	248	0.5031	0.4991	0.0135	1.756	-0.04%	2.682	11.63	1.216	10.62
12/26/2017	12/26/2016	12/25/2017	247	0.5026	0.4985	0.0135	1.740	-0.05%	2.684	11.59	1.216	10.59
12/27/2017	12/27/2016	12/26/2017	248	0.5030	0.4989	0.0135	1.743	-0.05%	2.686	11.63	1.217	10.62
12/28/2017	12/28/2016	12/27/2017	248	0.5037	0.4996	0.0135	1.747	-0.05%	2.682	11.63	1.218	10.65
12/29/2017	12/29/2016	12/28/2017	248	0.5004	0.4963	0.0135	1.747	-0.04%	2.665	11.49	1.218	10.65
1/2/2018	1/2/2017	1/1/2018	247	0.4997	0.4956	0.0135	1.744	-0.05%	2.675	11.52	1.213	10.53
1/3/2018	1/3/2017	1/2/2018	248	0.5009	0.4968	0.0135	1.745	-0.05%	2.676	11.59	1.213	10.56
1/4/2018	1/4/2017	1/3/2018	248	0.4987	0.4946	0.0135	1.693	-0.06%	2.646	11.46	1.227	10.61
1/5/2018	1/5/2017	1/4/2018	248	0.4995	0.4954	0.0133	1.712	-0.06%	2.575	11.31	1.229	10.80
1/8/2018	1/8/2017	1/7/2018	247	0.4778	0.4735	0.0139	1.692	-0.08%	2.478	10.44	1.278	10.69
1/9/2018	1/9/2017	1/8/2018	248	0.4782	0.4740	0.0138	1.748	-0.08%	2.478	10.45	1.281	10.74
1/10/2018	1/10/2017	1/9/2018	248	0.4747	0.4704	0.0139	1.722	-0.08%	2.472	10.37	1.277	10.67
1/11/2018	1/11/2017	1/10/2018	248	0.4821	0.4778	0.0138	1.716	-0.07%	2.474	10.45	1.288	10.90
1/12/2018	1/12/2017	1/11/2018	248	0.4819	0.4777	0.0137	1.709	-0.08%	2.479	10.52	1.278	10.82
1/16/2018	1/16/2017	1/15/2018	247	0.4785	0.4742	0.0137	1.698	-0.08%	2.476	10.54	1.259	10.62
1/17/2018	1/17/2017	1/16/2018	248	0.4783	0.4740	0.0137	1.695	-0.09%	2.473	10.55	1.261	10.65
1/18/2018	1/18/2017	1/17/2018	248	0.4713	0.4670	0.0137	1.694	-0.08%	2.431	10.37	1.266	10.53

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
1/19/2018	1/19/2017	1/18/2018	248	0.4711	0.4668	0.0137	1.692	-0.08%	2.427	10.36	1.265	10.53
1/22/2018	1/22/2017	1/21/2018	247	0.4752	0.4709	0.0137	1.707	-0.09%	2.463	10.49	1.263	10.53
1/23/2018	1/23/2017	1/22/2018	248	0.4771	0.4728	0.0137	1.697	-0.09%	2.491	10.64	1.262	10.51
1/24/2018	1/24/2017	1/23/2018	248	0.4777	0.4734	0.0137	1.704	-0.09%	2.489	10.65	1.261	10.52
1/25/2018	1/25/2017	1/24/2018	248	0.4748	0.4705	0.0137	1.706	-0.09%	2.466	10.53	1.258	10.51
1/26/2018	1/26/2017	1/25/2018	248	0.4650	0.4607	0.0136	1.717	-0.10%	2.394	10.19	1.246	10.44
1/29/2018	1/29/2017	1/28/2018	247	0.4613	0.4569	0.0137	1.709	-0.10%	2.355	10.03	1.247	10.41
1/30/2018	1/30/2017	1/29/2018	248	0.4627	0.4583	0.0137	1.704	-0.10%	2.365	10.15	1.242	10.39
1/31/2018	1/31/2017	1/30/2018	248	0.4665	0.4621	0.0137	1.693	-0.11%	2.406	10.37	1.240	10.33
2/1/2018	2/1/2017	1/31/2018	248	0.4661	0.4618	0.0137	1.693	-0.11%	2.404	10.36	1.245	10.32
2/2/2018	2/2/2017	2/1/2018	248	0.4680	0.4637	0.0136	1.693	-0.11%	2.400	10.39	1.240	10.37
2/5/2018	2/5/2017	2/4/2018	247	0.4653	0.4609	0.0137	1.694	-0.11%	2.384	10.27	1.248	10.33
2/6/2018	2/6/2017	2/5/2018	248	0.4681	0.4638	0.0137	1.684	-0.08%	2.137	10.43	1.255	10.34
2/7/2018	2/7/2017	2/6/2018	248	0.4634	0.4591	0.0138	1.710	-0.07%	2.114	10.28	1.223	10.29
2/8/2018	2/8/2017	2/7/2018	248	0.4604	0.4560	0.0138	1.690	-0.08%	2.109	10.20	1.229	10.25
2/9/2018	2/9/2017	2/8/2018	248	0.4656	0.4613	0.0139	1.710	-0.06%	2.015	10.50	1.229	10.16
2/12/2018	2/12/2017	2/11/2018	247	0.4663	0.4619	0.0139	1.730	-0.05%	2.032	10.58	1.220	10.07
2/13/2018	2/13/2017	2/12/2018	248	0.4696	0.4653	0.0139	1.738	-0.04%	2.039	10.76	1.217	10.06
2/14/2018	2/14/2017	2/13/2018	248	0.4675	0.4631	0.0139	1.742	-0.05%	2.032	10.69	1.217	10.04
2/15/2018	2/15/2017	2/14/2018	248	0.4675	0.4632	0.0139	1.737	-0.06%	2.030	10.80	1.212	9.92
2/16/2018	2/16/2017	2/15/2018	248	0.4615	0.4571	0.0139	1.721	-0.07%	1.953	10.46	1.225	10.03
2/20/2018	2/20/2017	2/19/2018	247	0.4606	0.4562	0.0139	1.724	-0.06%	1.950	10.44	1.217	9.97
2/21/2018	2/21/2017	2/20/2018	248	0.4503	0.4458	0.0141	1.702	-0.04%	1.911	10.16	1.217	9.87
2/22/2018	2/22/2017	2/21/2018	248	0.4519	0.4474	0.0141	1.722	-0.04%	1.899	10.12	1.229	9.97
2/23/2018	2/23/2017	2/22/2018	248	0.4521	0.4477	0.0141	1.722	-0.04%	1.901	10.14	1.230	9.97
2/26/2018	2/26/2017	2/25/2018	247	0.4464	0.4419	0.0141	1.693	-0.04%	1.850	9.93	1.230	9.91
2/27/2018	2/27/2017	2/26/2018	248	0.4460	0.4415	0.0141	1.693	-0.04%	1.832	9.90	1.232	9.96
2/28/2018	2/28/2017	2/27/2018	248	0.4462	0.4417	0.0140	1.704	-0.05%	1.814	9.91	1.229	9.96
3/1/2018	3/1/2017	2/28/2018	248	0.4498	0.4453	0.0140	1.710	-0.05%	1.833	10.10	1.224	9.91
3/2/2018	3/2/2017	3/1/2018	248	0.4372	0.4326	0.0140	1.713	-0.06%	1.763	9.82	1.210	9.69
3/5/2018	3/5/2017	3/4/2018	247	0.4594	0.4550	0.0136	1.753	-0.03%	1.748	10.03	1.258	10.33
3/6/2018	3/6/2017	3/5/2018	248	0.4596	0.4552	0.0136	1.754	-0.04%	1.740	10.05	1.259	10.36
3/7/2018	3/7/2017	3/6/2018	248	0.4563	0.4519	0.0135	1.768	-0.02%	1.727	10.05	1.239	10.23
3/8/2018	3/8/2017	3/7/2018	248	0.4531	0.4486	0.0135	1.757	-0.01%	1.721	9.97	1.238	10.18
3/9/2018	3/9/2017	3/8/2018	248	0.4529	0.4484	0.0136	1.757	-0.02%	1.715	9.92	1.243	10.22
3/12/2018	3/12/2017	3/11/2018	247	0.4506	0.4461	0.0135	1.772	-0.05%	1.660	9.74	1.243	10.26
3/13/2018	3/13/2017	3/12/2018	248	0.4506	0.4461	0.0134	1.783	-0.05%	1.659	9.75	1.243	10.29
3/14/2018	3/14/2017	3/13/2018	248	0.4532	0.4488	0.0134	1.780	-0.05%	1.670	9.83	1.245	10.31
3/15/2018	3/15/2017	3/14/2018	248	0.4521	0.4477	0.0134	1.783	-0.05%	1.659	9.79	1.243	10.31
3/16/2018	3/16/2017	3/15/2018	248	0.4521	0.4476	0.0134	1.782	-0.04%	1.667	9.81	1.243	10.29
3/19/2018	3/19/2017	3/18/2018	247	0.4481	0.4435	0.0134	1.782	-0.03%	1.655	9.73	1.232	10.17
3/20/2018	3/20/2017	3/19/2018	248	0.4487	0.4442	0.0134	1.783	-0.03%	1.653	9.83	1.222	10.13
3/21/2018	3/21/2017	3/20/2018	248	0.4449	0.4404	0.0133	1.621	-0.02%	1.643	9.82	1.206	10.00

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
3/22/2018	3/22/2017	3/21/2018	248	0.4888	0.4846	0.0129	1.665	-0.06%	1.724	10.63	1.289	11.01
3/23/2018	3/23/2017	3/22/2018	248	0.4983	0.4942	0.0129	1.727	-0.07%	1.752	11.06	1.278	11.00
3/26/2018	3/26/2017	3/25/2018	247	0.5046	0.5006	0.0129	1.728	-0.06%	1.752	11.31	1.276	10.98
3/27/2018	3/27/2017	3/26/2018	248	0.5057	0.5016	0.0129	1.726	-0.06%	1.743	11.45	1.268	10.93
3/28/2018	3/28/2017	3/27/2018	248	0.5082	0.5042	0.0129	1.734	-0.07%	1.753	11.55	1.262	10.94
3/29/2018	3/29/2017	3/28/2018	248	0.5052	0.5012	0.0129	1.737	-0.07%	1.737	11.43	1.259	10.93
4/2/2018	4/2/2017	4/1/2018	246	0.5130	0.5090	0.0128	1.701	-0.07%	1.742	11.54	1.277	11.08
4/3/2018	4/3/2017	4/2/2018	247	0.5157	0.5117	0.0128	1.703	-0.07%	1.739	11.69	1.276	11.10
4/4/2018	4/4/2017	4/3/2018	247	0.5154	0.5114	0.0128	1.705	-0.06%	1.727	11.66	1.272	11.11
4/5/2018	4/5/2017	4/4/2018	247	0.5161	0.5121	0.0128	1.707	-0.06%	1.728	11.70	1.273	11.11
4/6/2018	4/6/2017	4/5/2018	247	0.5173	0.5133	0.0128	1.701	-0.05%	1.745	11.82	1.271	11.04
4/9/2018	4/9/2017	4/8/2018	246	0.5221	0.5182	0.0128	1.714	-0.06%	1.758	12.03	1.270	10.99
4/10/2018	4/10/2017	4/9/2018	247	0.5226	0.5187	0.0128	1.715	-0.06%	1.759	12.07	1.270	11.02
4/11/2018	4/11/2017	4/10/2018	247	0.5205	0.5166	0.0128	1.706	-0.06%	1.727	11.96	1.276	11.04
4/12/2018	4/12/2017	4/11/2018	247	0.5148	0.5108	0.0129	1.718	-0.05%	1.719	11.85	1.263	10.88
4/13/2018	4/13/2017	4/12/2018	247	0.5146	0.5107	0.0129	1.740	-0.05%	1.722	11.86	1.253	10.87
4/16/2018	4/16/2017	4/15/2018	247	0.5075	0.5034	0.0130	1.744	-0.04%	1.714	11.72	1.227	10.68
4/17/2018	4/17/2017	4/16/2018	248	0.5075	0.5035	0.0130	1.755	-0.05%	1.707	11.71	1.228	10.74
4/18/2018	4/18/2017	4/17/2018	248	0.5061	0.5021	0.0130	1.755	-0.05%	1.694	11.64	1.227	10.75
4/19/2018	4/19/2017	4/18/2018	248	0.5031	0.4991	0.0130	1.748	-0.05%	1.693	11.58	1.213	10.67
4/20/2018	4/20/2017	4/19/2018	248	0.5003	0.4963	0.0130	1.768	-0.05%	1.691	11.55	1.183	10.58
4/23/2018	4/23/2017	4/22/2018	247	0.4969	0.4927	0.0131	1.695	-0.06%	1.678	11.46	1.171	10.47
4/24/2018	4/24/2017	4/23/2018	248	0.4968	0.4926	0.0130	1.700	-0.06%	1.678	11.49	1.171	10.48
4/25/2018	4/25/2017	4/24/2018	248	0.4465	0.4419	0.0127	1.694	-0.06%	1.452	10.10	1.081	9.78
4/26/2018	4/26/2017	4/25/2018	248	0.4459	0.4414	0.0127	1.750	-0.06%	1.456	10.10	1.080	9.76
4/27/2018	4/27/2017	4/26/2018	247	0.4497	0.4452	0.0127	1.764	-0.07%	1.457	10.14	1.084	9.83
4/30/2018	4/30/2017	4/29/2018	247	0.4465	0.4419	0.0128	1.737	-0.08%	1.451	10.00	1.096	9.84
5/1/2018	5/1/2017	4/30/2018	248	0.4475	0.4430	0.0128	1.744	-0.09%	1.457	10.07	1.096	9.85
5/2/2018	5/2/2017	5/1/2018	248	0.4473	0.4428	0.0128	1.745	-0.09%	1.456	10.07	1.096	9.84
5/3/2018	5/3/2017	5/2/2018	248	0.4458	0.4412	0.0128	1.744	-0.09%	1.452	10.03	1.095	9.82
5/4/2018	5/4/2017	5/3/2018	248	0.4444	0.4398	0.0128	1.743	-0.09%	1.453	10.04	1.089	9.75
5/7/2018	5/7/2017	5/6/2018	247	0.4461	0.4415	0.0127	1.727	-0.11%	1.435	10.02	1.084	9.81
5/8/2018	5/8/2017	5/7/2018	248	0.4457	0.4412	0.0127	1.733	-0.11%	1.434	10.03	1.084	9.82
5/9/2018	5/9/2017	5/8/2018	248	0.4401	0.4355	0.0127	1.725	-0.11%	1.435	9.99	1.065	9.63
5/10/2018	5/10/2017	5/9/2018	248	0.4409	0.4363	0.0127	1.729	-0.10%	1.437	10.03	1.060	9.62
5/11/2018	5/11/2017	5/10/2018	248	0.4408	0.4362	0.0127	1.729	-0.11%	1.435	10.04	1.059	9.61
5/14/2018	5/14/2017	5/13/2018	247	0.4404	0.4358	0.0128	1.727	-0.11%	1.431	9.99	1.059	9.60
5/15/2018	5/15/2017	5/14/2018	248	0.4391	0.4345	0.0128	1.721	-0.11%	1.428	9.97	1.061	9.62
5/16/2018	5/16/2017	5/15/2018	248	0.4376	0.4330	0.0128	1.708	-0.12%	1.438	10.02	1.051	9.50
5/17/2018	5/17/2017	5/16/2018	248	0.4368	0.4322	0.0129	1.699	-0.14%	1.433	9.96	1.057	9.53
5/18/2018	5/18/2017	5/17/2018	248	0.4295	0.4248	0.0128	1.714	-0.13%	1.410	9.71	1.070	9.50
5/21/2018	5/21/2017	5/20/2018	247	0.4290	0.4243	0.0128	1.719	-0.15%	1.398	9.61	1.069	9.54
5/22/2018	5/22/2017	5/21/2018	248	0.4285	0.4239	0.0128	1.717	-0.15%	1.395	9.62	1.069	9.55

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
5/23/2018	5/23/2017	5/22/2018	248	0.4306	0.4260	0.0128	1.718	-0.14%	1.392	9.57	1.081	9.68
5/24/2018	5/24/2017	5/23/2018	248	0.4297	0.4250	0.0128	1.712	-0.14%	1.393	9.58	1.077	9.64
5/25/2018	5/25/2017	5/24/2018	248	0.4298	0.4252	0.0130	1.708	-0.15%	1.409	9.56	1.094	9.66
5/29/2018	5/29/2017	5/28/2018	247	0.4305	0.4258	0.0130	1.750	-0.14%	1.409	9.56	1.092	9.64
5/30/2018	5/30/2017	5/29/2018	248	0.4563	0.4519	0.0130	1.749	-0.16%	1.480	10.17	1.117	10.11
5/31/2018	5/31/2017	5/30/2018	248	0.4577	0.4533	0.0130	1.764	-0.15%	1.489	10.28	1.112	10.06
6/1/2018	6/1/2017	5/31/2018	248	0.4547	0.4502	0.0131	1.760	-0.15%	1.508	10.32	1.110	9.88
6/4/2018	6/4/2017	6/3/2018	247	0.4511	0.4466	0.0132	1.751	-0.16%	1.499	10.21	1.112	9.81
6/5/2018	6/5/2017	6/4/2018	248	0.4503	0.4458	0.0132	1.765	-0.15%	1.505	10.26	1.106	9.77
6/6/2018	6/6/2017	6/5/2018	248	0.4519	0.4474	0.0132	1.773	-0.16%	1.506	10.27	1.109	9.82
6/7/2018	6/7/2017	6/6/2018	248	0.4577	0.4533	0.0132	1.774	-0.15%	1.522	10.41	1.115	9.92
6/8/2018	6/8/2017	6/7/2018	248	0.4563	0.4519	0.0132	1.768	-0.15%	1.521	10.39	1.117	9.89
6/11/2018	6/11/2017	6/10/2018	247	0.4554	0.4509	0.0133	1.780	-0.16%	1.526	10.36	1.133	9.83
6/12/2018	6/12/2017	6/11/2018	248	0.4547	0.4503	0.0133	1.799	-0.16%	1.530	10.39	1.131	9.82
6/13/2018	6/13/2017	6/12/2018	248	0.4540	0.4495	0.0133	1.800	-0.15%	1.526	10.37	1.128	9.81
6/14/2018	6/14/2017	6/13/2018	248	0.4539	0.4494	0.0133	1.800	-0.15%	1.526	10.36	1.129	9.82
6/15/2018	6/15/2017	6/14/2018	248	0.4546	0.4502	0.0133	1.792	-0.15%	1.525	10.36	1.127	9.85
6/18/2018	6/18/2017	6/17/2018	247	0.4541	0.4496	0.0132	1.796	-0.15%	1.510	10.25	1.130	9.90
6/19/2018	6/19/2017	6/18/2018	248	0.4541	0.4496	0.0132	1.796	-0.14%	1.507	10.26	1.129	9.93
6/20/2018	6/20/2017	6/19/2018	248	0.4480	0.4435	0.0132	1.789	-0.14%	1.477	10.04	1.129	9.90
6/21/2018	6/21/2017	6/20/2018	248	0.4449	0.4403	0.0132	1.795	-0.14%	1.465	9.92	1.130	9.89
6/22/2018	6/22/2017	6/21/2018	248	0.4462	0.4417	0.0132	1.791	-0.15%	1.472	9.99	1.129	9.88
6/25/2018	6/25/2017	6/24/2018	247	0.4434	0.4388	0.0133	1.797	-0.14%	1.476	9.98	1.117	9.74
6/26/2018	6/26/2017	6/25/2018	248	0.4434	0.4389	0.0133	1.796	-0.13%	1.457	9.99	1.119	9.77
6/27/2018	6/27/2017	6/26/2018	248	0.4415	0.4370	0.0133	1.795	-0.14%	1.455	9.96	1.115	9.72
6/28/2018	6/28/2017	6/27/2018	248	0.4440	0.4394	0.0132	1.798	-0.17%	1.506	10.35	1.089	9.41
6/29/2018	6/29/2017	6/28/2018	248	0.4402	0.4357	0.0132	1.799	-0.17%	1.496	10.25	1.083	9.36
7/2/2018	7/2/2017	7/1/2018	247	0.4371	0.4325	0.0133	1.801	-0.18%	1.514	10.31	1.087	9.12
7/3/2018	7/3/2017	7/2/2018	248	0.4371	0.4325	0.0133	1.808	-0.17%	1.510	10.31	1.088	9.16
7/5/2018	7/5/2017	7/4/2018	248	0.4300	0.4254	0.0133	1.792	-0.18%	1.505	10.24	1.072	8.94
7/6/2018	7/6/2017	7/5/2018	248	0.4302	0.4256	0.0134	1.777	-0.18%	1.532	10.38	1.061	8.79
7/9/2018	7/9/2017	7/8/2018	247	0.4313	0.4266	0.0135	1.765	-0.18%	1.567	10.58	1.037	8.55
7/10/2018	7/10/2017	7/9/2018	248	0.4275	0.4228	0.0135	1.795	-0.18%	1.563	10.58	1.017	8.43
7/11/2018	7/11/2017	7/10/2018	248	0.4280	0.4234	0.0135	1.798	-0.19%	1.562	10.57	1.017	8.47
7/12/2018	7/12/2017	7/11/2018	248	0.4317	0.4271	0.0135	1.787	-0.19%	1.573	10.70	1.017	8.47
7/13/2018	7/13/2017	7/12/2018	248	0.4331	0.4285	0.0135	1.794	-0.19%	1.597	10.85	1.004	8.33
7/16/2018	7/16/2017	7/15/2018	247	0.4314	0.4267	0.0135	1.793	-0.18%	1.603	10.84	1.000	8.22
7/17/2018	7/17/2017	7/16/2018	248	0.4453	0.4408	0.0139	1.727	-0.15%	1.591	10.48	1.122	9.32
7/18/2018	7/18/2017	7/17/2018	248	0.4445	0.4399	0.0139	1.804	-0.16%	1.584	10.41	1.131	9.36
7/19/2018	7/19/2017	7/18/2018	248	0.4450	0.4404	0.0139	1.823	-0.14%	1.587	10.43	1.132	9.36
7/20/2018	7/20/2017	7/19/2018	248	0.4443	0.4398	0.0139	1.817	-0.14%	1.593	10.46	1.123	9.30
7/23/2018	7/23/2017	7/22/2018	247	0.4432	0.4386	0.0139	1.809	-0.14%	1.589	10.41	1.120	9.27
7/24/2018	7/24/2017	7/23/2018	248	0.4442	0.4397	0.0139	1.810	-0.13%	1.589	10.43	1.117	9.33

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
7/25/2018	7/25/2017	7/24/2018	248	0.4446	0.4401	0.0139	1.817	-0.14%	1.598	10.54	1.103	9.23
7/26/2018	7/26/2017	7/25/2018	247	0.4418	0.4373	0.0139	1.816	-0.15%	1.593	10.48	1.104	9.13
7/27/2018	7/27/2017	7/26/2018	247	0.4416	0.4370	0.0139	1.817	-0.15%	1.593	10.47	1.103	9.12
7/30/2018	7/30/2017	7/29/2018	247	0.4431	0.4386	0.0139	1.787	-0.14%	1.587	10.44	1.112	9.23
7/31/2018	7/31/2017	7/30/2018	248	0.4424	0.4378	0.0140	1.766	-0.13%	1.569	10.29	1.132	9.41
8/1/2018	8/1/2017	7/31/2018	248	0.4416	0.4370	0.0140	1.747	-0.11%	1.573	10.30	1.126	9.36
8/2/2018	8/2/2017	8/1/2018	248	0.4395	0.4349	0.0140	1.771	-0.12%	1.569	10.26	1.124	9.32
8/3/2018	8/3/2017	8/2/2018	248	0.4383	0.4337	0.0141	1.751	-0.13%	1.573	10.22	1.130	9.31
8/6/2018	8/6/2017	8/5/2018	247	0.4364	0.4318	0.0141	1.752	-0.14%	1.573	10.20	1.127	9.21
8/7/2018	8/7/2017	8/6/2018	248	0.4357	0.4311	0.0141	1.757	-0.14%	1.573	10.22	1.123	9.21
8/8/2018	8/8/2017	8/7/2018	248	0.4362	0.4316	0.0141	1.758	-0.14%	1.576	10.24	1.122	9.20
8/9/2018	8/9/2017	8/8/2018	248	0.4340	0.4294	0.0141	1.759	-0.14%	1.573	10.21	1.115	9.14
8/10/2018	8/10/2017	8/9/2018	248	0.4341	0.4295	0.0141	1.771	-0.13%	1.568	10.20	1.113	9.16
8/13/2018	8/13/2017	8/12/2018	247	0.4372	0.4326	0.0141	1.751	-0.14%	1.579	10.26	1.120	9.19
8/14/2018	8/14/2017	8/13/2018	248	0.4417	0.4371	0.0141	1.749	-0.15%	1.595	10.39	1.127	9.27
8/15/2018	8/15/2017	8/14/2018	248	0.4403	0.4357	0.0141	1.749	-0.15%	1.591	10.34	1.127	9.27
8/16/2018	8/16/2017	8/15/2018	248	0.4438	0.4393	0.0141	1.749	-0.15%	1.600	10.46	1.129	9.28
8/17/2018	8/17/2017	8/16/2018	248	0.4431	0.4386	0.0141	1.744	-0.15%	1.595	10.45	1.129	9.26
8/20/2018	8/20/2017	8/19/2018	247	0.4369	0.4322	0.0141	1.738	-0.15%	1.576	10.27	1.121	9.16
8/21/2018	8/21/2017	8/20/2018	248	0.4369	0.4323	0.0141	1.738	-0.15%	1.576	10.29	1.121	9.18
8/22/2018	8/22/2017	8/21/2018	248	0.4368	0.4322	0.0141	1.736	-0.13%	1.585	10.32	1.120	9.14
8/23/2018	8/23/2017	8/22/2018	248	0.4359	0.4313	0.0141	1.738	-0.13%	1.586	10.30	1.118	9.12
8/24/2018	8/24/2017	8/23/2018	248	0.4368	0.4322	0.0142	1.740	-0.14%	1.596	10.34	1.122	9.12
8/27/2018	8/27/2017	8/26/2018	247	0.4365	0.4319	0.0142	1.751	-0.14%	1.595	10.32	1.118	9.08
8/28/2018	8/28/2017	8/27/2018	248	0.4411	0.4365	0.0142	1.748	-0.14%	1.612	10.48	1.123	9.14
8/29/2018	8/29/2017	8/28/2018	248	0.4414	0.4369	0.0142	1.748	-0.14%	1.611	10.46	1.127	9.17
8/30/2018	8/30/2017	8/29/2018	248	0.4405	0.4359	0.0142	1.759	-0.13%	1.610	10.48	1.119	9.12
8/31/2018	8/31/2017	8/30/2018	248	0.4428	0.4382	0.0142	1.764	-0.14%	1.617	10.53	1.122	9.15
9/4/2018	9/4/2017	9/3/2018	247	0.4434	0.4388	0.0142	1.763	-0.14%	1.627	10.55	1.123	9.11
9/5/2018	9/5/2017	9/4/2018	248	0.4435	0.4390	0.0142	1.764	-0.13%	1.608	10.47	1.133	9.26
9/6/2018	9/6/2017	9/5/2018	248	0.4394	0.4348	0.0142	1.759	-0.12%	1.590	10.34	1.140	9.23
9/7/2018	9/7/2017	9/6/2018	248	0.4400	0.4354	0.0142	1.768	-0.12%	1.586	10.35	1.138	9.24
9/10/2018	9/10/2017	9/9/2018	247	0.4413	0.4367	0.0142	1.769	-0.13%	1.595	10.38	1.151	9.22
9/11/2018	9/11/2017	9/10/2018	248	0.4413	0.4368	0.0142	1.774	-0.13%	1.594	10.39	1.151	9.25
9/12/2018	9/12/2017	9/11/2018	248	0.4378	0.4332	0.0142	1.766	-0.13%	1.587	10.30	1.148	9.20
9/13/2018	9/13/2017	9/12/2018	248	0.4316	0.4270	0.0142	1.756	-0.15%	1.575	10.25	1.122	8.99
9/14/2018	9/14/2017	9/13/2018	248	0.4330	0.4284	0.0141	1.758	-0.14%	1.576	10.28	1.124	9.02
9/17/2018	9/17/2017	9/16/2018	247	0.4337	0.4291	0.0141	1.761	-0.13%	1.578	10.28	1.124	9.01
9/18/2018	9/18/2017	9/17/2018	248	0.4336	0.4289	0.0141	1.759	-0.13%	1.573	10.27	1.128	9.06
9/19/2018	9/19/2017	9/18/2018	248	0.4349	0.4303	0.0141	1.763	-0.13%	1.572	10.28	1.134	9.10
9/20/2018	9/20/2017	9/19/2018	248	0.4424	0.4379	0.0141	1.765	-0.12%	1.580	10.34	1.143	9.35
9/21/2018	9/21/2017	9/20/2018	248	0.4467	0.4422	0.0141	1.754	-0.11%	1.593	10.48	1.146	9.38
9/24/2018	9/24/2017	9/23/2018	247	0.4452	0.4406	0.0141	1.743	-0.11%	1.610	10.55	1.127	9.19

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
9/25/2018	9/25/2017	9/24/2018	248	0.4455	0.4410	0.0141	1.745	-0.11%	1.611	10.59	1.126	9.20
9/26/2018	9/26/2017	9/25/2018	248	0.4429	0.4383	0.0140	1.749	-0.10%	1.599	10.56	1.114	9.13
9/27/2018	9/27/2017	9/26/2018	248	0.4448	0.4403	0.0140	1.744	-0.11%	1.606	10.59	1.118	9.17
9/28/2018	9/28/2017	9/27/2018	248	0.4400	0.4355	0.0140	1.752	-0.13%	1.599	10.57	1.102	8.99
10/1/2018	10/1/2017	9/30/2018	247	0.4483	0.4438	0.0140	1.750	-0.16%	1.599	10.59	1.122	9.27
10/2/2018	10/2/2017	10/1/2018	248	0.4473	0.4428	0.0140	1.745	-0.16%	1.597	10.59	1.122	9.28
10/3/2018	10/3/2017	10/2/2018	248	0.4501	0.4456	0.0139	1.753	-0.16%	1.601	10.65	1.126	9.34
10/4/2018	10/4/2017	10/3/2018	248	0.4522	0.4477	0.0139	1.757	-0.15%	1.601	10.65	1.134	9.43
10/5/2018	10/5/2017	10/4/2018	248	0.4489	0.4444	0.0139	1.754	-0.14%	1.598	10.64	1.109	9.29
10/8/2018	10/8/2017	10/7/2018	247	0.4464	0.4418	0.0140	1.761	-0.15%	1.589	10.60	1.100	9.18
10/9/2018	10/9/2017	10/8/2018	248	0.4464	0.4418	0.0139	1.762	-0.15%	1.588	10.63	1.099	9.19
10/10/2018	10/10/2017	10/9/2018	248	0.4448	0.4403	0.0139	1.764	-0.14%	1.586	10.62	1.092	9.13
10/11/2018	10/11/2017	10/10/2018	248	0.4414	0.4368	0.0140	1.753	-0.13%	1.514	10.41	1.103	9.23
10/12/2018	10/12/2017	10/11/2018	248	0.4355	0.4309	0.0140	1.734	-0.11%	1.460	10.23	1.106	9.19
10/15/2018	10/15/2017	10/14/2018	247	0.4351	0.4304	0.0141	1.744	-0.11%	1.451	10.19	1.108	9.17
10/16/2018	10/16/2017	10/15/2018	248	0.4272	0.4226	0.0142	1.731	-0.10%	1.441	10.06	1.098	9.03
10/17/2018	10/17/2017	10/16/2018	248	0.4276	0.4229	0.0142	1.752	-0.11%	1.418	10.05	1.100	9.05
10/18/2018	10/18/2017	10/17/2018	248	0.4281	0.4234	0.0142	1.752	-0.11%	1.418	10.05	1.102	9.08
10/19/2018	10/19/2017	10/18/2018	248	0.4313	0.4267	0.0142	1.752	-0.11%	1.425	10.18	1.101	9.07
10/22/2018	10/22/2017	10/21/2018	247	0.4311	0.4264	0.0142	1.751	-0.11%	1.425	10.15	1.104	9.05
10/23/2018	10/23/2017	10/22/2018	248	0.4329	0.4282	0.0142	1.752	-0.12%	1.430	10.22	1.100	9.09
10/24/2018	10/24/2017	10/23/2018	248	0.4310	0.4264	0.0141	1.728	-0.11%	1.414	10.15	1.099	9.09
10/25/2018	10/25/2017	10/24/2018	247	0.4285	0.4238	0.0141	1.734	-0.12%	1.412	10.16	1.082	8.93
10/26/2018	10/26/2017	10/25/2018	247	0.4257	0.4209	0.0141	1.730	-0.13%	1.404	10.10	1.078	8.87
10/29/2018	10/29/2017	10/28/2018	247	0.4312	0.4266	0.0141	1.727	-0.12%	1.433	10.40	1.062	8.77
10/30/2018	10/30/2017	10/29/2018	248	0.4287	0.4241	0.0141	1.721	-0.12%	1.432	10.40	1.045	8.71
10/31/2018	10/31/2017	10/30/2018	248	0.4296	0.4249	0.0141	1.724	-0.12%	1.428	10.42	1.045	8.71
11/1/2018	11/1/2017	10/31/2018	248	0.4278	0.4232	0.0141	1.719	-0.13%	1.412	10.37	1.048	8.70
11/2/2018	11/2/2017	11/1/2018	248	0.4273	0.4226	0.0143	1.738	-0.12%	1.441	10.48	1.042	8.54
11/5/2018	11/5/2017	11/4/2018	247	0.4240	0.4193	0.0144	1.718	-0.11%	1.434	10.40	1.036	8.45
11/6/2018	11/6/2017	11/5/2018	248	0.4232	0.4185	0.0143	1.738	-0.11%	1.432	10.41	1.035	8.45
11/7/2018	11/7/2017	11/6/2018	248	0.4236	0.4189	0.0143	1.740	-0.12%	1.429	10.40	1.039	8.48
11/8/2018	11/8/2017	11/7/2018	248	0.4257	0.4210	0.0143	1.733	-0.12%	1.420	10.46	1.047	8.49
11/9/2018	11/9/2017	11/8/2018	248	0.4283	0.4236	0.0143	1.749	-0.13%	1.419	10.47	1.060	8.59
11/12/2018	11/12/2017	11/11/2018	247	0.4398	0.4353	0.0141	1.802	-0.16%	1.440	10.81	1.050	8.64
11/13/2018	11/13/2017	11/12/2018	248	0.4474	0.4429	0.0141	1.801	-0.17%	1.458	11.10	1.052	8.67
11/14/2018	11/14/2017	11/13/2018	248	0.4487	0.4442	0.0141	1.801	-0.16%	1.458	11.10	1.056	8.74
11/15/2018	11/15/2017	11/14/2018	248	0.4478	0.4433	0.0141	1.803	-0.17%	1.455	11.10	1.048	8.69
11/16/2018	11/16/2017	11/15/2018	248	0.4451	0.4405	0.0141	1.813	-0.18%	1.466	11.17	1.027	8.47
11/19/2018	11/19/2017	11/18/2018	247	0.4500	0.4455	0.0140	1.838	-0.19%	1.451	11.13	1.050	8.71
11/20/2018	11/20/2017	11/19/2018	248	0.4500	0.4455	0.0140	1.838	-0.19%	1.437	11.10	1.049	8.79
11/21/2018	11/21/2017	11/20/2018	248	0.4594	0.4550	0.0141	1.829	-0.20%	1.479	11.46	1.055	8.76
11/23/2018	11/23/2017	11/22/2018	247	0.4591	0.4547	0.0141	1.857	-0.19%	1.493	11.50	1.048	8.65

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
11/26/2018	11/26/2017	11/25/2018	247	0.4613	0.4569	0.0141	1.860	-0.19%	1.494	11.52	1.055	8.72
11/27/2018	11/27/2017	11/26/2018	248	0.4721	0.4678	0.0142	1.860	-0.18%	1.530	11.83	1.074	8.89
11/28/2018	11/28/2017	11/27/2018	248	0.4712	0.4669	0.0142	1.864	-0.17%	1.528	11.82	1.070	8.86
11/29/2018	11/29/2017	11/28/2018	248	0.4741	0.4698	0.0141	1.885	-0.17%	1.508	11.80	1.106	9.04
11/30/2018	11/30/2017	11/29/2018	248	0.4734	0.4691	0.0143	1.853	-0.20%	1.498	11.59	1.148	9.27
12/3/2018	12/3/2017	12/2/2018	247	0.4693	0.4650	0.0144	1.817	-0.21%	1.501	11.49	1.145	9.15
12/4/2018	12/4/2017	12/3/2018	248	0.4713	0.4670	0.0144	1.846	-0.21%	1.509	11.63	1.140	9.12
12/6/2018	12/6/2017	12/5/2018	247	0.4735	0.4692	0.0145	1.837	-0.20%	1.500	11.78	1.133	8.98
12/7/2018	12/7/2017	12/6/2018	247	0.4726	0.4683	0.0145	1.823	-0.20%	1.495	11.80	1.126	8.91
12/10/2018	12/10/2017	12/9/2018	246	0.4718	0.4674	0.0144	1.833	-0.22%	1.481	11.78	1.117	8.85
12/11/2018	12/11/2017	12/10/2018	247	0.4768	0.4725	0.0144	1.835	-0.23%	1.494	11.90	1.130	8.99
12/12/2018	12/12/2017	12/11/2018	247	0.4766	0.4723	0.0145	1.844	-0.23%	1.496	11.90	1.124	8.97
12/13/2018	12/13/2017	12/12/2018	247	0.4658	0.4614	0.0151	1.755	-0.20%	1.553	11.84	1.120	8.51
12/14/2018	12/14/2017	12/13/2018	247	0.4655	0.4611	0.0152	1.876	-0.20%	1.554	11.83	1.123	8.51
12/17/2018	12/17/2017	12/16/2018	246	0.4653	0.4609	0.0152	1.880	-0.20%	1.530	11.73	1.130	8.59
12/18/2018	12/18/2017	12/17/2018	247	0.4668	0.4624	0.0152	1.881	-0.20%	1.528	11.82	1.125	8.59
12/19/2018	12/19/2017	12/18/2018	247	0.4639	0.4595	0.0151	1.884	-0.20%	1.509	11.68	1.128	8.64
12/20/2018	12/20/2017	12/19/2018	247	0.4660	0.4616	0.0152	1.893	-0.21%	1.521	11.75	1.132	8.65
12/21/2018	12/21/2017	12/20/2018	247	0.4651	0.4608	0.0153	1.870	-0.21%	1.533	11.87	1.102	8.44
12/24/2018	12/24/2017	12/23/2018	246	0.4692	0.4648	0.0153	1.897	-0.20%	1.532	11.96	1.110	8.47
12/26/2018	12/26/2017	12/25/2018	247	0.4618	0.4574	0.0153	1.878	-0.19%	1.492	11.71	1.119	8.51
12/27/2018	12/27/2017	12/26/2018	247	0.4659	0.4615	0.0154	1.900	-0.19%	1.481	11.89	1.112	8.45
12/28/2018	12/28/2017	12/27/2018	247	0.4545	0.4500	0.0156	1.851	-0.21%	1.461	11.54	1.122	8.38
12/31/2018	12/31/2017	12/30/2018	246	0.4527	0.4482	0.0158	1.919	-0.20%	1.469	11.51	1.119	8.28
1/2/2019	1/2/2018	1/1/2019	247	0.4534	0.4489	0.0157	1.925	-0.20%	1.471	11.56	1.118	8.29
1/3/2019	1/3/2018	1/2/2019	247	0.4524	0.4479	0.0157	1.924	-0.20%	1.467	11.52	1.112	8.31
1/4/2019	1/4/2018	1/3/2019	247	0.4533	0.4488	0.0157	1.913	-0.19%	1.461	11.55	1.111	8.30
1/7/2019	1/7/2018	1/6/2019	246	0.4796	0.4754	0.0153	1.888	-0.16%	1.505	12.51	1.069	8.21
1/8/2019	1/8/2018	1/7/2019	247	0.4783	0.4740	0.0153	1.878	-0.16%	1.510	12.57	1.055	8.11
1/9/2019	1/9/2018	1/8/2019	247	0.4784	0.4741	0.0153	1.883	-0.16%	1.507	12.58	1.049	8.10
1/10/2019	1/10/2018	1/9/2019	247	0.4756	0.4713	0.0153	1.875	-0.16%	1.493	12.43	1.062	8.17
1/11/2019	1/11/2018	1/10/2019	247	0.4739	0.4696	0.0153	1.890	-0.17%	1.493	12.44	1.054	8.06
1/14/2019	1/14/2018	1/13/2019	246	0.4737	0.4694	0.0154	1.893	-0.17%	1.494	12.40	1.057	8.06
1/15/2019	1/15/2018	1/14/2019	247	0.4733	0.4690	0.0153	1.891	-0.17%	1.491	12.40	1.048	8.09
1/16/2019	1/16/2018	1/15/2019	248	0.4735	0.4692	0.0153	1.891	-0.17%	1.489	12.44	1.048	8.10
1/17/2019	1/17/2018	1/16/2019	248	0.4810	0.4768	0.0156	1.867	-0.14%	1.498	12.27	1.131	8.75
1/18/2019	1/18/2018	1/17/2019	248	0.4716	0.4673	0.0159	1.944	-0.15%	1.486	11.99	1.136	8.66
1/23/2019	1/22/2018	1/21/2019	247	0.4735	0.4692	0.0159	1.985	-0.15%	1.490	12.04	1.135	8.63
1/23/2019	1/23/2018	1/22/2019	247	0.4756	0.4713	0.0158	2.000	-0.17%	1.489	12.10	1.134	8.65
1/24/2019	1/24/2018	1/23/2019	247	0.4737	0.4694	0.0159	2.002	-0.16%	1.491	12.05	1.136	8.62
1/25/2019	1/25/2018	1/24/2019	247	0.4705	0.4662	0.0160	2.019	-0.17%	1.487	11.98	1.133	8.56
1/28/2019	1/28/2018	1/27/2019	246	0.4749	0.4706	0.0161	2.038	-0.15%	1.511	12.12	1.138	8.54
1/29/2019	1/29/2018	1/28/2019	247	0.4747	0.4704	0.0160	2.043	-0.15%	1.506	12.11	1.141	8.59

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
1/30/2019	1/30/2018	1/29/2019	247	0.4748	0.4705	0.0160	2.049	-0.14%	1.502	12.09	1.144	8.63
1/31/2019	1/31/2018	1/30/2019	247	0.4733	0.4690	0.0160	2.058	-0.14%	1.485	12.01	1.141	8.66
2/1/2019	2/1/2018	1/31/2019	247	0.4743	0.4700	0.0161	2.047	-0.16%	1.455	11.72	1.185	9.10
2/4/2019	2/4/2018	2/3/2019	246	0.4730	0.4687	0.0161	2.047	-0.17%	1.455	11.70	1.181	9.01
2/5/2019	2/5/2018	2/4/2019	247	0.4721	0.4677	0.0161	2.048	-0.17%	1.453	11.70	1.180	9.02
2/6/2019	2/6/2018	2/5/2019	247	0.4664	0.4620	0.0161	2.045	-0.17%	1.467	11.48	1.180	9.02
2/7/2019	2/7/2018	2/6/2019	247	0.4677	0.4633	0.0160	2.050	-0.18%	1.467	11.50	1.206	9.06
2/8/2019	2/8/2018	2/7/2019	247	0.4709	0.4666	0.0162	2.032	-0.19%	1.500	11.65	1.214	9.02
2/11/2019	2/11/2018	2/10/2019	246	0.4674	0.4630	0.0163	2.039	-0.19%	1.510	11.45	1.228	9.06
2/12/2019	2/12/2018	2/11/2019	247	0.4659	0.4615	0.0163	2.041	-0.19%	1.510	11.45	1.226	9.04
2/13/2019	2/13/2018	2/12/2019	247	0.4659	0.4616	0.0163	2.035	-0.19%	1.510	11.44	1.227	9.05
2/14/2019	2/14/2018	2/13/2019	247	0.4666	0.4623	0.0162	2.041	-0.19%	1.510	11.46	1.228	9.06
2/15/2019	2/15/2018	2/14/2019	247	0.4656	0.4612	0.0163	2.039	-0.20%	1.508	11.39	1.239	9.11
2/19/2019	2/19/2018	2/18/2019	246	0.4768	0.4725	0.0163	2.028	-0.17%	1.556	11.67	1.257	9.24
2/20/2019	2/20/2018	2/19/2019	247	0.4763	0.4720	0.0163	2.045	-0.18%	1.548	11.62	1.266	9.33
2/21/2019	2/21/2018	2/20/2019	247	0.4838	0.4796	0.0162	2.077	-0.19%	1.563	11.83	1.268	9.42
2/22/2019	2/22/2018	2/21/2019	247	0.4839	0.4797	0.0162	2.078	-0.19%	1.567	11.86	1.266	9.39
2/25/2019	2/25/2018	2/24/2019	246	0.4853	0.4811	0.0162	2.082	-0.19%	1.577	11.88	1.261	9.38
2/26/2019	2/26/2018	2/25/2019	247	0.4862	0.4820	0.0162	2.081	-0.18%	1.579	11.92	1.263	9.42
2/27/2019	2/27/2018	2/26/2019	247	0.4851	0.4809	0.0162	2.070	-0.17%	1.584	11.90	1.263	9.39
2/28/2019	2/28/2018	2/27/2019	247	0.4866	0.4824	0.0162	2.060	-0.17%	1.591	11.91	1.269	9.45
3/1/2019	3/1/2018	2/28/2019	247	0.4820	0.4778	0.0163	2.046	-0.15%	1.580	11.76	1.269	9.42
3/4/2019	3/4/2018	3/3/2019	246	0.4817	0.4775	0.0163	2.052	-0.16%	1.586	11.73	1.267	9.40
3/5/2019	3/5/2018	3/4/2019	247	0.4820	0.4777	0.0162	2.052	-0.16%	1.587	11.76	1.268	9.42
3/6/2019	3/6/2018	3/5/2019	247	0.4818	0.4775	0.0162	2.050	-0.16%	1.590	11.75	1.267	9.42
3/7/2019	3/7/2018	3/6/2019	247	0.4811	0.4768	0.0162	2.050	-0.16%	1.585	11.72	1.269	9.43
3/8/2019	3/8/2018	3/7/2019	247	0.4831	0.4789	0.0164	2.038	-0.18%	1.610	11.83	1.274	9.39
3/11/2019	3/11/2018	3/10/2019	246	0.4879	0.4837	0.0163	2.068	-0.16%	1.628	11.94	1.276	9.43
3/12/2019	3/12/2018	3/11/2019	247	0.4876	0.4834	0.0165	2.041	-0.15%	1.659	12.09	1.269	9.27
3/13/2019	3/13/2018	3/12/2019	247	0.4842	0.4800	0.0166	2.089	-0.16%	1.649	11.95	1.277	9.28
3/14/2019	3/14/2018	3/13/2019	247	0.4842	0.4800	0.0166	2.107	-0.15%	1.652	11.97	1.277	9.26
3/15/2019	3/15/2018	3/14/2019	247	0.4817	0.4774	0.0167	2.109	-0.16%	1.652	11.93	1.271	9.19
3/18/2019	3/18/2018	3/17/2019	246	0.4805	0.4763	0.0167	2.105	-0.17%	1.648	11.87	1.271	9.16
3/19/2019	3/19/2018	3/18/2019	247	0.4820	0.4778	0.0168	2.103	-0.15%	1.659	11.91	1.284	9.23
3/20/2019	3/20/2018	3/19/2019	247	0.4813	0.4770	0.0168	2.125	-0.16%	1.659	11.84	1.295	9.28
3/21/2019	3/21/2018	3/20/2019	247	0.4844	0.4802	0.0168	2.102	-0.17%	1.665	11.89	1.296	9.37
3/22/2019	3/22/2018	3/21/2019	247	0.4925	0.4884	0.0167	2.108	-0.17%	1.636	11.83	1.326	9.84
3/25/2019	3/25/2018	3/24/2019	246	0.4837	0.4795	0.0167	2.119	-0.17%	1.621	11.53	1.321	9.73
3/26/2019	3/26/2018	3/25/2019	247	0.4836	0.4794	0.0167	2.122	-0.17%	1.620	11.55	1.321	9.75
3/27/2019	3/27/2018	3/26/2019	247	0.4841	0.4798	0.0167	2.122	-0.17%	1.623	11.51	1.333	9.82
3/28/2019	3/28/2018	3/27/2019	247	0.4804	0.4762	0.0167	2.111	-0.15%	1.609	11.36	1.346	9.83
3/29/2019	3/29/2018	3/28/2019	247	0.4719	0.4676	0.0169	2.123	-0.17%	1.610	11.23	1.328	9.59
4/1/2019	4/1/2018	3/31/2019	247	0.4693	0.4650	0.0169	2.125	-0.17%	1.601	11.13	1.329	9.59

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
4/2/2019	4/2/2018	4/1/2019	248	0.4802	0.4760	0.0169	2.130	-0.16%	1.630	11.40	1.342	9.82
4/3/2019	4/3/2018	4/2/2019	248	0.4774	0.4731	0.0169	2.132	-0.16%	1.632	11.32	1.336	9.77
4/4/2019	4/4/2018	4/3/2019	248	0.4782	0.4739	0.0169	2.136	-0.16%	1.634	11.35	1.338	9.78
4/5/2019	4/5/2018	4/4/2019	248	0.4753	0.4710	0.0170	2.130	-0.16%	1.633	11.30	1.328	9.71
4/8/2019	4/8/2018	4/7/2019	247	0.4696	0.4652	0.0170	2.128	-0.18%	1.608	11.01	1.332	9.74
4/9/2019	4/9/2018	4/8/2019	248	0.4693	0.4649	0.0170	2.128	-0.18%	1.608	11.03	1.331	9.75
4/10/2019	4/10/2018	4/9/2019	248	0.4690	0.4647	0.0170	2.125	-0.18%	1.607	11.02	1.332	9.75
4/11/2019	4/11/2018	4/10/2019	248	0.4706	0.4662	0.0169	2.109	-0.18%	1.622	11.07	1.332	9.76
4/12/2019	4/12/2018	4/11/2019	248	0.4749	0.4707	0.0169	2.107	-0.17%	1.626	11.11	1.348	9.91
4/15/2019	4/15/2018	4/14/2019	247	0.4793	0.4750	0.0169	2.108	-0.17%	1.630	11.15	1.353	10.01
4/16/2019	4/16/2018	4/15/2019	248	0.4782	0.4739	0.0169	2.116	-0.17%	1.631	11.16	1.348	9.99
4/17/2019	4/17/2018	4/16/2019	248	0.4802	0.4759	0.0169	2.111	-0.15%	1.636	11.18	1.356	10.07
4/18/2019	4/18/2018	4/17/2019	248	0.4791	0.4749	0.0169	2.113	-0.15%	1.640	11.17	1.343	10.03
4/22/2019	4/22/2018	4/21/2019	246	0.4855	0.4812	0.0169	2.112	-0.16%	1.643	11.17	1.397	10.22
4/23/2019	4/23/2018	4/22/2019	247	0.4855	0.4813	0.0168	2.112	-0.16%	1.643	11.20	1.397	10.24
4/24/2019	4/24/2018	4/23/2019	247	0.4848	0.4806	0.0169	2.082	-0.17%	1.629	11.09	1.408	10.33
4/25/2019	4/25/2018	4/24/2019	247	0.4942	0.4901	0.0166	2.104	-0.19%	1.659	11.44	1.395	10.38
4/26/2019	4/26/2018	4/25/2019	247	0.4939	0.4897	0.0167	2.102	-0.19%	1.660	11.43	1.396	10.37
4/29/2019	4/29/2018	4/28/2019	246	0.4960	0.4919	0.0166	2.119	-0.18%	1.663	11.49	1.389	10.35
4/30/2019	4/30/2018	4/29/2019	247	0.4971	0.4929	0.0166	2.121	-0.17%	1.664	11.52	1.386	10.41
5/1/2019	5/1/2018	4/30/2019	247	0.4966	0.4925	0.0166	2.123	-0.17%	1.661	11.49	1.386	10.42
5/2/2019	5/2/2018	5/1/2019	247	0.4973	0.4932	0.0166	2.120	-0.18%	1.663	11.51	1.386	10.43
5/3/2019	5/3/2018	5/2/2019	247	0.4988	0.4947	0.0165	2.125	-0.17%	1.660	11.51	1.389	10.50
5/6/2019	5/6/2018	5/5/2019	246	0.4994	0.4952	0.0166	2.126	-0.18%	1.656	11.46	1.401	10.53
5/7/2019	5/7/2018	5/6/2019	247	0.4999	0.4958	0.0165	2.129	-0.18%	1.658	11.51	1.400	10.56
5/8/2019	5/8/2018	5/7/2019	247	0.5042	0.5002	0.0165	2.124	-0.18%	1.670	11.68	1.402	10.57
5/9/2019	5/9/2018	5/8/2019	247	0.5075	0.5034	0.0165	2.141	-0.17%	1.667	11.71	1.418	10.69
5/10/2019	5/10/2018	5/9/2019	247	0.5079	0.5039	0.0165	2.147	-0.18%	1.665	11.70	1.426	10.72
5/13/2019	5/13/2018	5/12/2019	246	0.5071	0.5030	0.0165	2.143	-0.17%	1.670	11.67	1.423	10.67
5/14/2019	5/14/2018	5/13/2019	247	0.5070	0.5029	0.0165	2.133	-0.17%	1.665	11.78	1.408	10.59
5/15/2019	5/15/2018	5/14/2019	247	0.5078	0.5038	0.0165	2.149	-0.16%	1.666	11.82	1.406	10.59
5/16/2019	5/16/2018	5/15/2019	247	0.5092	0.5051	0.0164	2.166	-0.16%	1.655	11.77	1.413	10.70
5/17/2019	5/17/2018	5/16/2019	247	0.5078	0.5037	0.0164	2.164	-0.16%	1.651	11.77	1.406	10.64
5/20/2019	5/20/2018	5/19/2019	246	0.5070	0.5029	0.0165	2.170	-0.15%	1.649	11.74	1.407	10.59
5/21/2019	5/21/2018	5/20/2019	247	0.5057	0.5017	0.0165	2.166	-0.15%	1.653	11.77	1.399	10.54
5/22/2019	5/22/2018	5/21/2019	247	0.5068	0.5028	0.0165	2.170	-0.15%	1.656	11.81	1.400	10.55
5/23/2019	5/23/2018	5/22/2019	247	0.5066	0.5026	0.0165	2.170	-0.17%	1.662	11.85	1.398	10.50
5/24/2019	5/24/2018	5/23/2019	247	0.5076	0.5035	0.0165	2.145	-0.16%	1.657	11.87	1.403	10.52
5/28/2019	5/28/2018	5/27/2019	246	0.5090	0.5050	0.0163	2.166	-0.15%	1.651	11.91	1.388	10.49
5/29/2019	5/29/2018	5/28/2019	247	0.5104	0.5063	0.0163	2.164	-0.15%	1.655	11.98	1.390	10.53
5/30/2019	5/30/2018	5/29/2019	247	0.4961	0.4920	0.0163	2.161	-0.13%	1.616	11.65	1.377	10.22
5/31/2019	5/31/2018	5/30/2019	247	0.4920	0.4878	0.0163	2.150	-0.14%	1.609	11.56	1.365	10.14
6/3/2019	6/3/2018	6/2/2019	246	0.4963	0.4921	0.0162	2.176	-0.12%	1.611	11.66	1.360	10.17

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
6/4/2019	6/4/2018	6/3/2019	247	0.4955	0.4914	0.0162	2.174	-0.12%	1.611	11.68	1.356	10.16
6/5/2019	6/5/2018	6/4/2019	247	0.5060	0.5020	0.0162	2.179	-0.11%	1.637	11.98	1.366	10.32
6/6/2019	6/6/2018	6/5/2019	247	0.5039	0.4998	0.0162	2.176	-0.12%	1.615	11.81	1.379	10.41
6/7/2019	6/7/2018	6/6/2019	247	0.4972	0.4931	0.0163	2.152	-0.14%	1.597	11.60	1.384	10.33
6/10/2019	6/10/2018	6/9/2019	246	0.4977	0.4936	0.0163	2.155	-0.14%	1.586	11.57	1.364	10.33
6/11/2019	6/11/2018	6/10/2019	247	0.4992	0.4951	0.0163	2.156	-0.14%	1.589	11.63	1.366	10.39
6/12/2019	6/12/2018	6/11/2019	247	0.4998	0.4957	0.0163	2.160	-0.14%	1.588	11.63	1.368	10.41
6/13/2019	6/13/2018	6/12/2019	247	0.5006	0.4965	0.0163	2.160	-0.14%	1.590	11.65	1.367	10.43
6/14/2019	6/14/2018	6/13/2019	247	0.5006	0.4965	0.0163	2.160	-0.14%	1.590	11.65	1.367	10.43
6/17/2019	6/17/2018	6/16/2019	246	0.4993	0.4952	0.0163	2.158	-0.14%	1.591	11.62	1.367	10.36
6/18/2019	6/18/2018	6/17/2019	247	0.4978	0.4937	0.0163	2.161	-0.14%	1.591	11.63	1.362	10.33
6/19/2019	6/19/2018	6/18/2019	247	0.5021	0.4981	0.0163	2.148	-0.13%	1.609	11.76	1.369	10.38
6/20/2019	6/20/2018	6/19/2019	247	0.5021	0.4980	0.0163	2.136	-0.14%	1.621	11.84	1.355	10.29
6/21/2019	6/21/2018	6/20/2019	247	0.5024	0.4983	0.0163	2.145	-0.14%	1.613	11.82	1.356	10.33
6/24/2019	6/24/2018	6/23/2019	246	0.5027	0.4986	0.0163	2.144	-0.13%	1.607	11.76	1.363	10.36
6/25/2019	6/25/2018	6/24/2019	247	0.5030	0.4989	0.0163	2.148	-0.14%	1.607	11.78	1.364	10.40
6/26/2019	6/26/2018	6/25/2019	247	0.5019	0.4979	0.0163	2.141	-0.14%	1.613	11.75	1.363	10.38
6/27/2019	6/27/2018	6/26/2019	247	0.5027	0.4986	0.0164	2.126	-0.12%	1.606	11.66	1.382	10.52
6/28/2019	6/28/2018	6/27/2019	247	0.5008	0.4967	0.0164	2.133	-0.10%	1.599	11.61	1.377	10.48
7/1/2019	7/1/2018	6/30/2019	246	0.5027	0.4986	0.0163	2.134	-0.10%	1.597	11.61	1.385	10.53
7/2/2019	7/2/2018	7/1/2019	247	0.5014	0.4973	0.0163	2.128	-0.10%	1.594	11.61	1.382	10.52
7/3/2019	7/3/2018	7/2/2019	247	0.5015	0.4974	0.0163	2.125	-0.11%	1.594	11.61	1.382	10.52
7/5/2019	7/5/2018	7/4/2019	247	0.5015	0.4974	0.0164	2.123	-0.11%	1.603	11.65	1.382	10.47
7/8/2019	7/8/2018	7/7/2019	246	0.5041	0.5000	0.0163	2.124	-0.11%	1.570	11.45	1.406	10.76
7/9/2019	7/9/2018	7/8/2019	247	0.4970	0.4929	0.0166	2.113	-0.13%	1.589	11.39	1.405	10.55
7/10/2019	7/10/2018	7/9/2019	247	0.4958	0.4917	0.0167	2.081	-0.14%	1.593	11.33	1.422	10.56
7/11/2019	7/11/2018	7/10/2019	247	0.4927	0.4886	0.0167	2.114	-0.13%	1.598	11.32	1.413	10.43
7/12/2019	7/12/2018	7/11/2019	247	0.4923	0.4881	0.0167	2.126	-0.13%	1.593	11.27	1.414	10.46
7/15/2019	7/15/2018	7/14/2019	246	0.4931	0.4890	0.0168	2.112	-0.12%	1.600	11.26	1.423	10.47
7/16/2019	7/16/2018	7/15/2019	247	0.4901	0.4860	0.0168	2.097	-0.11%	1.600	11.25	1.413	10.39
7/17/2019	7/17/2018	7/16/2019	247	0.4745	0.4702	0.0167	2.078	-0.13%	1.599	11.33	1.336	9.59
7/18/2019	7/18/2018	7/17/2019	247	0.4755	0.4713	0.0166	2.089	-0.12%	1.605	11.40	1.329	9.56
7/19/2019	7/19/2018	7/18/2019	247	0.4751	0.4708	0.0166	2.092	-0.13%	1.603	11.39	1.325	9.54
7/22/2019	7/22/2018	7/21/2019	246	0.4781	0.4738	0.0167	2.086	-0.14%	1.606	11.39	1.343	9.63
7/23/2019	7/23/2018	7/22/2019	247	0.4785	0.4742	0.0166	2.091	-0.13%	1.607	11.42	1.344	9.66
7/24/2019	7/24/2018	7/23/2019	247	0.4797	0.4754	0.0166	2.093	-0.13%	1.612	11.47	1.350	9.67
7/25/2019	7/25/2018	7/24/2019	246	0.4795	0.4752	0.0166	2.091	-0.13%	1.611	11.43	1.351	9.65
7/26/2019	7/26/2018	7/25/2019	247	0.4778	0.4735	0.0166	2.088	-0.13%	1.609	11.43	1.345	9.62
7/29/2019	7/29/2018	7/28/2019	246	0.4776	0.4733	0.0167	2.096	-0.14%	1.613	11.46	1.340	9.53
7/30/2019	7/30/2018	7/29/2019	247	0.4781	0.4738	0.0166	2.096	-0.15%	1.615	11.49	1.340	9.57
7/31/2019	7/31/2018	7/30/2019	247	0.4779	0.4736	0.0166	2.110	-0.16%	1.625	11.60	1.320	9.42
8/1/2019	8/1/2018	7/31/2019	247	0.4817	0.4774	0.0165	2.117	-0.16%	1.611	11.59	1.342	9.62
8/2/2019	8/2/2018	8/1/2019	247	0.4833	0.4791	0.0165	2.112	-0.17%	1.617	11.64	1.329	9.63

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
8/5/2019	8/5/2018	8/4/2019	246	0.4785	0.4743	0.0166	2.088	-0.13%	1.575	11.28	1.358	9.79
8/6/2019	8/6/2018	8/5/2019	247	0.4802	0.4759	0.0166	2.093	-0.12%	1.559	11.41	1.353	9.76
8/7/2019	8/7/2018	8/6/2019	247	0.4787	0.4744	0.0167	2.101	-0.13%	1.556	11.37	1.351	9.73
8/8/2019	8/8/2018	8/7/2019	247	0.4800	0.4758	0.0166	2.101	-0.14%	1.551	11.34	1.351	9.84
8/9/2019	8/9/2018	8/8/2019	247	0.4839	0.4796	0.0166	2.101	-0.14%	1.554	11.46	1.355	9.87
8/12/2019	8/12/2018	8/11/2019	246	0.4797	0.4754	0.0166	2.110	-0.12%	1.535	11.30	1.348	9.82
8/13/2019	8/13/2018	8/12/2019	247	0.4864	0.4822	0.0168	2.061	-0.15%	1.570	11.43	1.387	10.02
8/14/2019	8/14/2018	8/13/2019	247	0.4843	0.4801	0.0169	2.116	-0.13%	1.576	11.44	1.382	9.92
8/15/2019	8/15/2018	8/14/2019	247	0.5010	0.4969	0.0169	2.130	-0.14%	1.628	11.98	1.396	10.07
8/16/2019	8/16/2018	8/15/2019	247	0.4945	0.4903	0.0171	2.099	-0.15%	1.626	11.83	1.391	9.94
8/19/2019	8/19/2018	8/18/2019	246	0.5037	0.4996	0.0173	2.128	-0.13%	1.677	12.06	1.423	10.06
8/20/2019	8/20/2018	8/19/2019	247	0.5046	0.5005	0.0173	2.148	-0.13%	1.676	12.12	1.421	10.07
8/21/2019	8/21/2018	8/20/2019	247	0.5044	0.5004	0.0173	2.141	-0.12%	1.677	12.13	1.418	10.06
8/22/2019	8/22/2018	8/21/2019	247	0.5039	0.4999	0.0173	2.151	-0.14%	1.670	12.13	1.412	10.04
8/23/2019	8/23/2018	8/22/2019	247	0.5053	0.5013	0.0173	2.141	-0.13%	1.666	12.09	1.422	10.15
8/26/2019	8/26/2018	8/25/2019	246	0.5073	0.5033	0.0173	2.144	-0.12%	1.660	12.15	1.421	10.13
8/27/2019	8/27/2018	8/26/2019	247	0.5081	0.5041	0.0172	2.144	-0.12%	1.662	12.20	1.421	10.16
8/28/2019	8/28/2018	8/27/2019	247	0.5017	0.4976	0.0173	2.133	-0.12%	1.653	12.06	1.403	10.01
8/29/2019	8/29/2018	8/28/2019	247	0.5014	0.4973	0.0173	2.142	-0.11%	1.654	12.08	1.398	9.97
8/30/2019	8/30/2018	8/29/2019	247	0.5003	0.4962	0.0173	2.136	-0.12%	1.649	12.06	1.394	9.95
9/3/2019	9/3/2018	9/2/2019	246	0.4990	0.4949	0.0173	2.139	-0.11%	1.644	12.00	1.391	9.90
9/4/2019	9/4/2018	9/3/2019	247	0.4959	0.4918	0.0174	2.134	-0.10%	1.638	11.95	1.386	9.86
9/5/2019	9/5/2018	9/4/2019	247	0.4976	0.4934	0.0174	2.138	-0.11%	1.653	12.09	1.380	9.77
9/6/2019	9/6/2018	9/5/2019	247	0.5036	0.4996	0.0174	2.133	-0.10%	1.676	12.29	1.387	9.83
9/9/2019	9/9/2018	9/8/2019	246	0.5032	0.4991	0.0174	2.132	-0.09%	1.673	12.24	1.385	9.81
9/10/2019	9/10/2018	9/9/2019	247	0.5076	0.5035	0.0174	2.133	-0.08%	1.672	12.26	1.381	10.06
9/11/2019	9/11/2018	9/10/2019	247	0.5090	0.5050	0.0174	2.131	-0.07%	1.673	12.27	1.377	10.12
9/12/2019	9/12/2018	9/11/2019	247	0.5091	0.5050	0.0173	2.134	-0.08%	1.667	12.25	1.379	10.15
9/13/2019	9/13/2018	9/12/2019	247	0.5095	0.5055	0.0173	2.136	-0.08%	1.667	12.25	1.383	10.16
9/16/2019	9/16/2018	9/15/2019	246	0.5099	0.5059	0.0174	2.135	-0.07%	1.667	12.22	1.378	10.17
9/17/2019	9/17/2018	9/16/2019	247	0.5111	0.5071	0.0174	2.131	-0.08%	1.672	12.28	1.381	10.21
9/18/2019	9/18/2018	9/17/2019	247	0.5110	0.5070	0.0174	2.136	-0.09%	1.674	12.29	1.376	10.19
9/19/2019	9/19/2018	9/18/2019	247	0.5089	0.5049	0.0174	2.132	-0.10%	1.675	12.26	1.372	10.13
9/20/2019	9/20/2018	9/19/2019	247	0.5053	0.5013	0.0174	2.139	-0.11%	1.671	12.22	1.374	9.99
9/23/2019	9/23/2018	9/22/2019	246	0.5047	0.5006	0.0174	2.144	-0.12%	1.665	12.15	1.378	10.00
9/24/2019	9/24/2018	9/23/2019	247	0.5040	0.5000	0.0174	2.136	-0.12%	1.667	12.16	1.380	10.00
9/25/2019	9/25/2018	9/24/2019	247	0.5060	0.5019	0.0174	2.137	-0.13%	1.672	12.21	1.383	10.04
9/26/2019	9/26/2018	9/25/2019	247	0.5055	0.5015	0.0174	2.136	-0.13%	1.672	12.21	1.380	10.02
9/27/2019	9/27/2018	9/26/2019	247	0.5043	0.5002	0.0174	2.131	-0.13%	1.671	12.18	1.380	10.00
9/30/2019	9/30/2018	9/29/2019	246	0.5006	0.4964	0.0175	2.139	-0.10%	1.660	12.07	1.376	9.89
10/1/2019	10/1/2018	9/30/2019	247	0.5005	0.4964	0.0175	2.143	-0.11%	1.659	12.09	1.378	9.92
10/2/2019	10/2/2018	10/1/2019	247	0.5043	0.5002	0.0174	2.144	-0.11%	1.670	12.21	1.381	9.96
10/3/2019	10/3/2018	10/2/2019	247	0.5008	0.4967	0.0175	2.143	-0.10%	1.647	12.11	1.379	9.91

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
10/4/2019	10/4/2018	10/3/2019	247	0.4998	0.4957	0.0175	2.146	-0.11%	1.644	12.09	1.377	9.88
10/7/2019	10/7/2018	10/6/2019	246	0.5010	0.4968	0.0175	2.144	-0.12%	1.641	12.06	1.397	9.92
10/8/2019	10/8/2018	10/7/2019	247	0.5008	0.4968	0.0175	2.141	-0.12%	1.642	12.09	1.398	9.94
10/9/2019	10/9/2018	10/8/2019	247	0.5027	0.4986	0.0175	2.142	-0.12%	1.643	12.15	1.399	9.94
10/10/2019	10/10/2018	10/9/2019	247	0.5030	0.4989	0.0175	2.143	-0.13%	1.641	12.16	1.401	9.96
10/11/2019	10/11/2018	10/10/2019	247	0.5072	0.5031	0.0175	2.150	-0.13%	1.690	12.35	1.394	9.93
10/14/2019	10/14/2018	10/13/2019	246	0.5175	0.5135	0.0174	2.141	-0.13%	1.756	12.71	1.397	9.96
10/15/2019	10/15/2018	10/14/2019	247	0.5174	0.5135	0.0174	2.139	-0.12%	1.754	12.71	1.400	10.00
10/16/2019	10/16/2018	10/15/2019	247	0.5260	0.5221	0.0173	2.151	-0.13%	1.769	12.94	1.409	10.16
10/17/2019	10/17/2018	10/16/2019	247	0.5254	0.5215	0.0173	2.149	-0.12%	1.789	12.96	1.406	10.11
10/18/2019	10/18/2018	10/17/2019	247	0.5253	0.5214	0.0173	2.149	-0.12%	1.790	12.97	1.405	10.09
10/21/2019	10/21/2018	10/20/2019	246	0.5238	0.5199	0.0173	2.146	-0.12%	1.786	12.86	1.409	10.10
10/22/2019	10/22/2018	10/21/2019	247	0.5247	0.5208	0.0173	2.145	-0.11%	1.789	12.92	1.402	10.12
10/23/2019	10/23/2018	10/22/2019	247	0.5216	0.5177	0.0174	2.133	-0.11%	1.789	12.87	1.401	10.02
10/24/2019	10/24/2018	10/23/2019	247	0.5237	0.5198	0.0173	2.134	-0.12%	1.801	12.93	1.402	10.05
10/25/2019	10/25/2018	10/24/2019	248	0.5237	0.5198	0.0173	2.133	-0.12%	1.798	12.94	1.404	10.10
10/28/2019	10/28/2018	10/27/2019	247	0.5250	0.5211	0.0172	2.153	-0.11%	1.798	12.88	1.414	10.19
10/29/2019	10/29/2018	10/28/2019	248	0.5244	0.5205	0.0172	2.152	-0.11%	1.799	12.90	1.410	10.18
10/30/2019	10/30/2018	10/29/2019	248	0.5266	0.5228	0.0172	2.162	-0.12%	1.800	12.93	1.431	10.26
10/31/2019	10/31/2018	10/30/2019	247	0.5263	0.5224	0.0172	2.158	-0.11%	1.806	12.90	1.430	10.23
11/1/2019	11/1/2018	10/31/2019	247	0.5293	0.5254	0.0172	2.122	-0.11%	1.822	12.99	1.431	10.28
11/4/2019	11/4/2018	11/3/2019	246	0.5342	0.5304	0.0170	2.166	-0.13%	1.810	13.05	1.430	10.41
11/5/2019	11/5/2018	11/4/2019	247	0.5366	0.5328	0.0170	2.164	-0.12%	1.817	13.12	1.440	10.51
11/6/2019	11/6/2018	11/5/2019	247	0.5367	0.5329	0.0170	2.174	-0.12%	1.818	13.12	1.438	10.51
11/7/2019	11/7/2018	11/6/2019	247	0.5366	0.5328	0.0170	2.176	-0.11%	1.821	13.14	1.437	10.49
11/8/2019	11/8/2018	11/7/2019	247	0.5366	0.5328	0.0170	2.171	-0.11%	1.837	13.13	1.436	10.49
11/11/2019	11/11/2018	11/10/2019	246	0.5369	0.5331	0.0170	2.179	-0.10%	1.832	13.07	1.440	10.53
11/12/2019	11/12/2018	11/11/2019	247	0.5369	0.5331	0.0169	2.183	-0.10%	1.832	13.10	1.440	10.55
11/13/2019	11/13/2018	11/12/2019	247	0.5319	0.5281	0.0169	2.182	-0.10%	1.824	12.90	1.436	10.53
11/14/2019	11/14/2018	11/13/2019	247	0.5322	0.5284	0.0170	2.170	-0.12%	1.829	12.86	1.454	10.59
11/15/2019	11/15/2018	11/14/2019	247	0.5354	0.5316	0.0170	2.163	-0.13%	1.835	12.93	1.463	10.68
11/18/2019	11/18/2018	11/17/2019	246	0.5382	0.5344	0.0170	2.172	-0.12%	1.840	12.98	1.472	10.71
11/19/2019	11/19/2018	11/18/2019	247	0.5383	0.5345	0.0169	2.172	-0.12%	1.840	13.01	1.472	10.74
11/20/2019	11/20/2018	11/19/2019	247	0.5384	0.5346	0.0169	2.168	-0.13%	1.854	13.05	1.476	10.69
11/21/2019	11/21/2018	11/20/2019	247	0.5323	0.5285	0.0169	2.160	-0.12%	1.824	12.77	1.474	10.71
11/22/2019	11/22/2018	11/21/2019	247	0.5332	0.5294	0.0168	2.161	-0.12%	1.817	12.75	1.479	10.78
11/25/2019	11/25/2018	11/24/2019	247	0.5309	0.5270	0.0168	2.158	-0.11%	1.812	12.69	1.472	10.73
11/26/2019	11/26/2018	11/25/2019	248	0.5306	0.5268	0.0168	2.158	-0.12%	1.808	12.70	1.473	10.76
11/27/2019	11/27/2018	11/26/2019	248	0.5237	0.5198	0.0168	2.165	-0.13%	1.780	12.46	1.464	10.68
11/29/2019	11/29/2018	11/28/2019	247	0.5259	0.5220	0.0168	2.163	-0.13%	1.803	12.54	1.461	10.65
12/2/2019	12/2/2018	12/1/2019	246	0.5294	0.5255	0.0166	2.199	-0.10%	1.821	12.80	1.428	10.46
12/3/2019	12/3/2018	12/2/2019	247	0.5294	0.5255	0.0166	2.202	-0.10%	1.815	12.81	1.429	10.50
12/4/2019	12/4/2018	12/3/2019	247	0.5292	0.5254	0.0166	2.205	-0.10%	1.815	12.77	1.433	10.54

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
12/5/2019	12/5/2018	12/4/2019	247	0.5306	0.5268	0.0165	2.221	-0.10%	1.835	12.71	1.451	10.70
12/6/2019	12/6/2018	12/5/2019	248	0.5306	0.5267	0.0164	2.221	-0.10%	1.835	12.73	1.451	10.72
12/9/2019	12/9/2018	12/8/2019	247	0.5305	0.5267	0.0164	2.222	-0.11%	1.844	12.64	1.460	10.76
12/10/2019	12/10/2018	12/9/2019	248	0.5303	0.5265	0.0164	2.226	-0.11%	1.844	12.67	1.459	10.78
12/11/2019	12/11/2018	12/10/2019	248	0.5258	0.5219	0.0164	2.225	-0.10%	1.829	12.55	1.451	10.68
12/12/2019	12/12/2018	12/11/2019	248	0.5260	0.5221	0.0164	2.174	-0.09%	1.830	12.56	1.456	10.68
12/13/2019	12/13/2018	12/12/2019	248	0.5422	0.5385	0.0158	2.230	-0.10%	1.791	12.72	1.473	11.33
12/16/2019	12/16/2018	12/15/2019	247	0.5424	0.5386	0.0158	2.231	-0.12%	1.814	12.73	1.473	11.28
12/17/2019	12/17/2018	12/16/2019	248	0.5428	0.5390	0.0158	2.230	-0.11%	1.822	12.81	1.471	11.26
12/18/2019	12/18/2018	12/17/2019	248	0.5417	0.5379	0.0158	2.223	-0.11%	1.827	12.72	1.480	11.31
12/19/2019	12/19/2018	12/18/2019	248	0.5425	0.5388	0.0158	2.216	-0.11%	1.833	12.77	1.476	11.29
12/20/2019	12/20/2018	12/19/2019	248	0.5369	0.5331	0.0158	2.220	-0.10%	1.820	12.61	1.462	11.18
12/23/2019	12/23/2018	12/22/2019	247	0.5376	0.5338	0.0158	2.241	-0.11%	1.811	12.34	1.502	11.46
12/24/2019	12/24/2018	12/23/2019	248	0.5368	0.5330	0.0158	2.234	-0.11%	1.811	12.35	1.501	11.46
12/26/2019	12/26/2018	12/25/2019	248	0.5433	0.5396	0.0156	2.220	-0.14%	1.874	12.67	1.489	11.44
12/27/2019	12/27/2018	12/26/2019	248	0.5435	0.5398	0.0156	2.224	-0.13%	1.914	12.62	1.492	11.51
12/30/2019	12/30/2018	12/29/2019	247	0.5565	0.5529	0.0152	2.235	-0.12%	1.934	13.02	1.482	11.69
12/31/2019	12/31/2018	12/30/2019	248	0.5559	0.5523	0.0152	2.232	-0.12%	1.926	13.01	1.484	11.73
1/2/2020	1/2/2019	1/1/2020	248	0.5558	0.5521	0.0152	2.230	-0.11%	1.926	12.99	1.486	11.74
1/3/2020	1/3/2019	1/2/2020	248	0.5523	0.5487	0.0156	2.165	-0.10%	1.964	12.97	1.508	11.58
1/6/2020	1/6/2019	1/5/2020	247	0.5449	0.5412	0.0156	2.197	-0.11%	2.000	12.60	1.504	11.55
1/7/2020	1/7/2019	1/6/2020	248	0.5450	0.5413	0.0155	2.197	-0.12%	2.000	12.63	1.504	11.58
1/8/2020	1/8/2019	1/7/2020	248	0.5385	0.5348	0.0157	2.190	-0.11%	1.991	12.44	1.503	11.45
1/9/2020	1/9/2019	1/8/2020	248	0.5372	0.5334	0.0158	2.143	-0.09%	2.004	12.40	1.517	11.43
1/10/2020	1/10/2019	1/9/2020	248	0.5410	0.5373	0.0157	2.165	-0.08%	2.028	12.60	1.505	11.40
1/13/2020	1/13/2019	1/12/2020	247	0.5416	0.5378	0.0157	2.164	-0.08%	2.029	12.58	1.504	11.40
1/14/2020	1/14/2019	1/13/2020	248	0.5393	0.5355	0.0157	2.162	-0.09%	2.024	12.55	1.500	11.37
1/15/2020	1/15/2019	1/14/2020	248	0.5413	0.5376	0.0157	2.175	-0.09%	2.030	12.60	1.520	11.42
1/16/2020	1/16/2019	1/15/2020	248	0.5430	0.5393	0.0157	2.143	-0.09%	2.035	12.60	1.518	11.51
1/17/2020	1/17/2019	1/16/2020	248	0.5334	0.5296	0.0155	2.078	-0.12%	2.032	12.74	1.445	10.85
1/21/2020	1/21/2019	1/20/2020	247	0.5399	0.5361	0.0153	2.107	-0.11%	2.045	12.88	1.443	10.97
1/22/2020	1/22/2019	1/21/2020	248	0.5410	0.5372	0.0153	2.113	-0.11%	2.049	12.94	1.439	11.01
1/23/2020	1/23/2019	1/22/2020	248	0.5370	0.5332	0.0153	2.095	-0.10%	2.038	12.76	1.441	11.01
1/24/2020	1/24/2019	1/23/2020	248	0.5353	0.5315	0.0153	2.058	-0.10%	2.032	12.71	1.439	10.98
1/27/2020	1/27/2019	1/26/2020	247	0.5293	0.5254	0.0153	2.031	-0.10%	2.004	12.52	1.415	10.85
1/28/2020	1/28/2019	1/27/2020	248	0.5258	0.5219	0.0153	2.018	-0.08%	1.950	12.35	1.424	10.92
1/29/2020	1/29/2019	1/28/2020	248	0.5268	0.5230	0.0153	2.026	-0.09%	1.964	12.43	1.421	10.88
1/30/2020	1/30/2019	1/29/2020	248	0.5249	0.5210	0.0154	2.020	-0.08%	1.963	12.40	1.416	10.82
1/31/2020	1/31/2019	1/30/2020	247	0.5248	0.5209	0.0154	2.006	-0.08%	1.978	12.40	1.419	10.76
2/3/2020	2/3/2019	2/2/2020	247	0.5210	0.5171	0.0154	2.018	-0.05%	2.018	12.76	1.362	10.13
2/4/2020	2/4/2019	2/3/2020	248	0.5173	0.5134	0.0154	2.028	-0.06%	2.008	12.66	1.365	10.12
2/5/2020	2/5/2019	2/4/2020	248	0.5157	0.5117	0.0154	2.014	-0.06%	1.981	12.57	1.369	10.14
2/6/2020	2/6/2019	2/5/2020	248	0.5147	0.5107	0.0155	2.010	-0.06%	1.978	12.56	1.365	10.10

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
2/7/2020	2/7/2019	2/6/2020	248	0.4488	0.4443	0.0177	1.796	-0.02%	2.037	11.29	1.314	8.48
2/10/2020	2/10/2019	2/9/2020	247	0.4435	0.4390	0.0175	2.049	0.01%	1.973	11.01	1.309	8.57
2/11/2020	2/11/2019	2/10/2020	248	0.4426	0.4380	0.0175	2.048	0.01%	1.968	10.99	1.312	8.59
2/12/2020	2/12/2019	2/11/2020	248	0.4446	0.4401	0.0175	2.060	0.01%	1.972	11.03	1.316	8.63
2/13/2020	2/13/2019	2/12/2020	248	0.4416	0.4370	0.0175	2.044	0.01%	1.979	10.97	1.312	8.57
2/14/2020	2/14/2019	2/13/2020	248	0.4397	0.4351	0.0176	2.034	0.02%	1.976	10.93	1.311	8.54
2/18/2020	2/18/2019	2/17/2020	247	0.4290	0.4244	0.0176	2.018	0.02%	1.936	10.67	1.285	8.33
2/19/2020	2/19/2019	2/18/2020	248	0.4328	0.4281	0.0175	2.018	0.01%	1.947	10.76	1.291	8.43
2/20/2020	2/20/2019	2/19/2020	248	0.4308	0.4262	0.0175	2.011	0.02%	1.955	10.81	1.272	8.28
2/21/2020	2/21/2019	2/20/2020	248	0.4303	0.4257	0.0175	2.015	0.02%	1.948	10.78	1.271	8.29
2/24/2020	2/24/2019	2/23/2020	247	0.4323	0.4277	0.0176	2.005	0.01%	1.973	10.87	1.274	8.23
2/25/2020	2/25/2019	2/24/2020	248	0.4469	0.4424	0.0176	2.010	0.01%	1.972	11.41	1.272	8.24
2/26/2020	2/26/2019	2/25/2020	248	0.4466	0.4421	0.0177	2.005	0.02%	1.923	11.46	1.264	8.15
2/27/2020	2/27/2019	2/26/2020	248	0.4460	0.4415	0.0177	2.005	0.02%	1.913	11.41	1.269	8.19
2/28/2020	2/28/2019	2/27/2020	248	0.4541	0.4497	0.0177	2.005	0.02%	1.858	11.72	1.266	8.16
3/2/2020	3/2/2019	3/1/2020	247	0.4596	0.4552	0.0177	2.012	0.01%	1.862	11.87	1.268	8.17
3/3/2020	3/3/2019	3/2/2020	248	0.4382	0.4336	0.0180	1.987	-0.01%	1.677	10.94	1.327	8.45
3/4/2020	3/4/2019	3/3/2020	249	0.4490	0.4445	0.0179	2.024	-0.02%	1.706	11.24	1.325	8.60
3/5/2020	3/5/2019	3/4/2020	249	0.4466	0.4421	0.0180	2.022	-0.04%	1.623	10.99	1.347	8.82
3/6/2020	3/6/2019	3/5/2020	249	0.4578	0.4534	0.0180	2.026	-0.04%	1.649	11.36	1.344	8.87
3/9/2020	3/9/2019	3/8/2020	247	0.4559	0.4514	0.0179	1.984	-0.03%	1.616	11.26	1.328	8.81
3/10/2020	3/10/2019	3/9/2020	248	0.5086	0.5046	0.0179	1.973	-0.03%	1.656	13.31	1.295	8.75
3/11/2020	3/11/2019	3/10/2020	249	0.5107	0.5067	0.0180	1.974	-0.03%	1.662	13.56	1.237	8.54
3/12/2020	3/12/2019	3/11/2020	249	0.5244	0.5205	0.0178	1.953	-0.05%	1.643	13.98	1.242	8.71
3/13/2020	3/13/2019	3/12/2020	249	0.5755	0.5720	0.0179	1.937	-0.03%	1.609	16.26	1.128	8.32
3/16/2020	3/16/2019	3/15/2020	247	0.5626	0.5590	0.0185	1.802	-0.03%	1.584	16.27	0.896	7.01
3/17/2020	3/17/2019	3/16/2020	248	0.5529	0.5492	0.0190	1.865	-0.01%	1.440	16.09	0.867	6.63
3/18/2020	3/18/2019	3/17/2020	249	0.5603	0.5567	0.0190	1.905	-0.01%	1.438	16.41	0.867	6.64
3/19/2020	3/19/2019	3/18/2020	249	0.5589	0.5553	0.0190	1.867	-0.02%	1.400	16.39	0.858	6.57
3/20/2020	3/20/2019	3/19/2020	249	0.5617	0.5581	0.0190	1.856	0.01%	1.408	16.44	0.874	6.70
3/23/2020	3/23/2019	3/22/2020	247	0.5598	0.5562	0.0190	1.860	0.05%	1.404	16.46	0.837	6.28
3/24/2020	3/24/2019	3/23/2020	248	0.5403	0.5366	0.0194	1.798	0.07%	1.373	15.90	0.803	5.92
3/25/2020	3/25/2019	3/24/2020	249	0.5738	0.5704	0.0194	1.828	0.07%	1.382	17.22	0.797	5.90
3/26/2020	3/26/2019	3/25/2020	249	0.5767	0.5732	0.0194	1.826	0.08%	1.386	17.34	0.792	5.85
3/27/2020	3/27/2019	3/26/2020	249	0.5678	0.5643	0.0196	1.808	0.05%	1.341	16.95	0.815	5.98
3/30/2020	3/30/2019	3/29/2020	247	0.5824	0.5789	0.0195	1.785	0.05%	1.361	17.36	0.839	6.22
3/31/2020	3/31/2019	3/30/2020	248	0.5823	0.5789	0.0195	1.787	0.03%	1.351	17.35	0.846	6.37
4/1/2020	4/1/2019	3/31/2020	249	0.5811	0.5777	0.0195	1.786	0.03%	1.351	17.37	0.827	6.30
4/2/2020	4/2/2019	4/1/2020	249	0.5877	0.5843	0.0194	1.789	0.01%	1.356	17.66	0.814	6.23
4/3/2020	4/3/2019	4/2/2020	249	0.5879	0.5846	0.0194	1.786	0.01%	1.355	17.67	0.816	6.23
4/6/2020	4/6/2019	4/5/2020	247	0.5900	0.5867	0.0195	1.793	0.02%	1.356	17.68	0.814	6.21
4/7/2020	4/7/2019	4/6/2020	248	0.6006	0.5973	0.0195	1.796	0.02%	1.357	18.18	0.799	6.15
4/8/2020	4/8/2019	4/7/2020	249	0.6010	0.5977	0.0195	1.786	0.04%	1.361	18.22	0.808	6.22

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
4/9/2020	4/9/2019	4/8/2020	249	0.5901	0.5868	0.0197	1.790	0.02%	1.344	17.82	0.796	6.05
4/13/2020	4/13/2019	4/12/2020	246	0.5860	0.5826	0.0199	1.773	0.01%	1.343	17.66	0.731	5.65
4/14/2020	4/14/2019	4/13/2020	247	0.5871	0.5837	0.0199	1.782	0.00%	1.344	17.73	0.731	5.72
4/15/2020	4/15/2019	4/14/2020	248	0.5810	0.5776	0.0201	1.778	0.01%	1.350	17.70	0.634	5.15
4/16/2020	4/16/2019	4/15/2020	248	0.5871	0.5838	0.0203	1.830	-0.02%	1.370	17.85	0.672	5.46
4/17/2020	4/17/2019	4/16/2020	248	0.5858	0.5824	0.0203	1.865	-0.03%	1.369	17.84	0.640	5.31
4/20/2020	4/20/2019	4/19/2020	247	0.5902	0.5868	0.0203	1.871	-0.02%	1.375	17.98	0.628	5.29
4/21/2020	4/21/2019	4/20/2020	248	0.5915	0.5882	0.0203	1.870	-0.03%	1.378	18.06	0.631	5.34
4/22/2020	4/22/2019	4/21/2020	249	0.5939	0.5906	0.0203	1.871	-0.03%	1.376	18.20	0.630	5.35
4/23/2020	4/23/2019	4/22/2020	249	0.5934	0.5901	0.0203	1.863	-0.03%	1.370	18.15	0.637	5.44
4/24/2020	4/24/2019	4/23/2020	249	0.5951	0.5918	0.0202	1.873	-0.02%	1.373	18.24	0.629	5.38
4/27/2020	4/27/2019	4/26/2020	248	0.5891	0.5858	0.0205	1.860	-0.03%	1.368	17.97	0.629	5.31
4/28/2020	4/28/2019	4/27/2020	249	0.5863	0.5829	0.0211	1.904	0.01%	1.393	17.77	0.695	5.74
4/29/2020	4/29/2019	4/28/2020	250	0.5867	0.5833	0.0211	1.949	0.02%	1.393	17.79	0.702	5.83
4/30/2020	4/30/2019	4/29/2020	249	0.5864	0.5830	0.0211	1.949	0.02%	1.393	17.76	0.700	5.78
5/1/2020	5/1/2019	4/30/2020	249	0.5877	0.5844	0.0211	1.952	0.01%	1.396	17.79	0.705	5.85
5/4/2020	5/4/2019	5/3/2020	247	0.5898	0.5865	0.0212	1.952	0.01%	1.398	17.82	0.701	5.78
5/5/2020	5/5/2019	5/4/2020	248	0.5900	0.5867	0.0212	1.951	0.01%	1.398	17.86	0.702	5.81
5/6/2020	5/6/2019	5/5/2020	249	0.5898	0.5865	0.0211	1.950	0.00%	1.395	17.85	0.709	5.92
5/7/2020	5/7/2019	5/6/2020	249	0.5900	0.5866	0.0211	1.946	-0.01%	1.395	17.85	0.712	5.94
5/8/2020	5/8/2019	5/7/2020	249	0.5899	0.5866	0.0211	1.948	0.01%	1.394	17.84	0.715	5.97
5/11/2020	5/11/2019	5/10/2020	247	0.5908	0.5875	0.0212	1.947	0.00%	1.393	17.80	0.717	5.97
5/12/2020	5/12/2019	5/11/2020	248	0.5919	0.5886	0.0211	1.947	-0.01%	1.393	17.83	0.723	6.11
5/13/2020	5/13/2019	5/12/2020	249	0.5901	0.5868	0.0212	1.944	-0.01%	1.390	17.81	0.717	6.07
5/14/2020	5/14/2019	5/13/2020	248	0.5888	0.5855	0.0212	1.944	-0.01%	1.389	17.73	0.717	6.05
5/15/2020	5/15/2019	5/14/2020	248	0.5885	0.5852	0.0212	1.952	0.00%	1.390	17.72	0.708	6.04
5/18/2020	5/18/2019	5/17/2020	246	0.5881	0.5847	0.0213	1.941	-0.01%	1.389	17.58	0.722	6.14
5/19/2020	5/19/2019	5/18/2020	247	0.5963	0.5930	0.0215	1.955	0.02%	1.416	17.88	0.753	6.40
5/20/2020	5/20/2019	5/19/2020	248	0.5962	0.5929	0.0215	1.968	0.02%	1.416	17.91	0.749	6.40
5/21/2020	5/21/2019	5/20/2020	248	0.5975	0.5942	0.0216	1.954	0.04%	1.424	17.94	0.760	6.46
5/22/2020	5/22/2019	5/21/2020	248	0.5976	0.5943	0.0216	1.969	0.04%	1.424	17.95	0.759	6.45
5/26/2020	5/26/2019	5/25/2020	246	0.5972	0.5939	0.0217	1.972	0.04%	1.423	17.87	0.754	6.40
5/27/2020	5/27/2019	5/26/2020	247	0.6047	0.6015	0.0220	1.939	0.08%	1.449	17.99	0.824	7.05
5/28/2020	5/28/2019	5/27/2020	248	0.6088	0.6056	0.0219	1.965	0.09%	1.454	18.11	0.827	7.31
5/29/2020	5/29/2019	5/28/2020	248	0.6093	0.6061	0.0219	1.968	0.09%	1.451	18.08	0.826	7.42
6/1/2020	6/1/2019	5/31/2020	246	0.6093	0.6060	0.0220	1.966	0.09%	1.450	17.99	0.827	7.44
6/2/2020	6/2/2019	6/1/2020	247	0.6102	0.6070	0.0219	1.964	0.10%	1.453	18.05	0.831	7.50
6/3/2020	6/3/2019	6/2/2020	248	0.6105	0.6073	0.0219	1.963	0.10%	1.454	18.10	0.830	7.50
6/4/2020	6/4/2019	6/3/2020	248	0.6119	0.6087	0.0219	1.959	0.11%	1.456	18.16	0.825	7.51
6/5/2020	6/5/2019	6/4/2020	248	0.6105	0.6074	0.0219	1.950	0.11%	1.449	18.07	0.826	7.59
6/8/2020	6/8/2019	6/7/2020	246	0.6122	0.6090	0.0219	1.964	0.14%	1.454	18.14	0.808	7.37
6/9/2020	6/9/2019	6/8/2020	247	0.6122	0.6090	0.0220	1.975	0.15%	1.458	18.17	0.814	7.42
6/10/2020	6/10/2019	6/9/2020	248	0.6131	0.6100	0.0219	1.990	0.14%	1.461	18.22	0.821	7.51

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
6/11/2020	6/11/2019	6/10/2020	248	0.6101	0.6069	0.0220	1.996	0.13%	1.460	18.15	0.794	7.35
6/12/2020	6/12/2019	6/11/2020	248	0.6184	0.6153	0.0220	2.000	0.13%	1.465	18.52	0.792	7.35
6/15/2020	6/15/2019	6/14/2020	246	0.6202	0.6171	0.0221	1.997	0.15%	1.467	18.47	0.801	7.47
6/16/2020	6/16/2019	6/15/2020	247	0.6202	0.6171	0.0220	1.998	0.15%	1.467	18.51	0.801	7.49
6/17/2020	6/17/2019	6/16/2020	248	0.6198	0.6167	0.0220	1.996	0.14%	1.460	18.50	0.805	7.56
6/18/2020	6/18/2019	6/17/2020	248	0.6206	0.6175	0.0220	1.995	0.13%	1.460	18.50	0.809	7.64
6/19/2020	6/19/2019	6/18/2020	248	0.6201	0.6170	0.0220	1.999	0.12%	1.457	18.49	0.807	7.63
6/22/2020	6/22/2019	6/21/2020	246	0.6207	0.6176	0.0221	1.998	0.12%	1.459	18.44	0.809	7.60
6/23/2020	6/23/2019	6/22/2020	247	0.6196	0.6165	0.0220	1.995	0.13%	1.460	18.45	0.801	7.55
6/24/2020	6/24/2019	6/23/2020	248	0.6199	0.6168	0.0220	1.996	0.13%	1.460	18.50	0.801	7.57
6/25/2020	6/25/2019	6/24/2020	247	0.6200	0.6168	0.0220	1.995	0.13%	1.460	18.47	0.801	7.54
6/26/2020	6/26/2019	6/25/2020	247	0.6219	0.6188	0.0221	1.989	0.15%	1.464	18.50	0.811	7.69
6/29/2020	6/29/2019	6/28/2020	244	0.6231	0.6200	0.0221	2.001	0.12%	1.465	18.46	0.804	7.59
6/30/2020	6/30/2019	6/29/2020	245	0.6213	0.6182	0.0222	1.981	0.14%	1.469	18.45	0.802	7.54
7/1/2020	7/1/2019	6/30/2020	246	0.6212	0.6181	0.0222	1.996	0.13%	1.467	18.47	0.803	7.57
7/2/2020	7/2/2019	7/1/2020	246	0.6217	0.6185	0.0222	1.996	0.12%	1.466	18.46	0.810	7.66
7/6/2020	7/6/2019	7/5/2020	244	0.6237	0.6206	0.0222	1.957	0.11%	1.468	18.48	0.807	7.61
7/7/2020	7/7/2019	7/6/2020	245	0.6250	0.6219	0.0221	1.954	0.12%	1.472	18.58	0.809	7.63
7/8/2020	7/8/2019	7/7/2020	245	0.6250	0.6219	0.0221	1.954	0.12%	1.472	18.58	0.809	7.63
7/9/2020	7/9/2019	7/8/2020	245	0.6306	0.6275	0.0218	2.003	0.15%	1.468	18.78	0.812	7.76
7/10/2020	7/10/2019	7/9/2020	244	0.6337	0.6307	0.0218	2.002	0.16%	1.468	18.86	0.815	7.83
7/13/2020	7/13/2019	7/12/2020	242	0.6364	0.6333	0.0218	2.009	0.16%	1.469	18.86	0.814	7.92
7/14/2020	7/14/2019	7/13/2020	242	0.6364	0.6333	0.0218	2.009	0.16%	1.469	18.86	0.814	7.92
7/15/2020	7/15/2019	7/14/2020	242	0.6364	0.6333	0.0218	2.009	0.16%	1.469	18.86	0.814	7.92
7/16/2020	7/16/2019	7/15/2020	242	0.6372	0.6342	0.0218	2.013	0.15%	1.469	18.89	0.816	7.94
7/17/2020	7/17/2019	7/16/2020	242	0.6386	0.6356	0.0217	2.014	0.14%	1.471	18.96	0.814	7.94
7/20/2020	7/20/2019	7/19/2020	240	0.6391	0.6360	0.0218	2.015	0.14%	1.469	18.90	0.809	7.91
7/21/2020	7/21/2019	7/20/2020	241	0.6386	0.6356	0.0217	2.011	0.15%	1.470	18.93	0.805	7.89
7/22/2020	7/22/2019	7/21/2020	242	0.6273	0.6242	0.0221	1.995	0.13%	1.468	18.59	0.777	7.52
7/23/2020	7/23/2019	7/22/2020	242	0.6269	0.6238	0.0221	2.043	0.12%	1.468	18.59	0.774	7.50
7/24/2020	7/24/2019	7/23/2020	242	0.6258	0.6227	0.0221	2.045	0.12%	1.469	18.56	0.767	7.42
7/27/2020	7/27/2019	7/26/2020	241	0.6259	0.6228	0.0222	2.050	0.12%	1.468	18.52	0.768	7.42
7/28/2020	7/28/2019	7/27/2020	242	0.6260	0.6229	0.0221	2.051	0.11%	1.466	18.54	0.769	7.49
7/29/2020	7/29/2019	7/28/2020	242	0.6260	0.6229	0.0221	2.051	0.11%	1.466	18.54	0.769	7.49
7/30/2020	7/30/2019	7/29/2020	241	0.6260	0.6228	0.0222	2.052	0.12%	1.466	18.51	0.769	7.47
7/31/2020	7/31/2019	7/30/2020	241	0.6269	0.6238	0.0222	2.050	0.11%	1.467	18.53	0.771	7.51
8/3/2020	8/3/2019	8/2/2020	239	0.6300	0.6268	0.0221	2.049	0.09%	1.474	18.66	0.755	7.33
8/4/2020	8/4/2019	8/3/2020	240	0.6283	0.6252	0.0222	2.046	0.09%	1.476	18.65	0.747	7.25
8/5/2020	8/5/2019	8/4/2020	241	0.6283	0.6252	0.0221	2.054	0.09%	1.476	18.69	0.747	7.27
8/6/2020	8/6/2019	8/5/2020	241	0.6271	0.6239	0.0221	2.052	0.09%	1.477	18.64	0.747	7.27
8/7/2020	8/7/2019	8/6/2020	241	0.6274	0.6242	0.0221	2.053	0.09%	1.478	18.64	0.749	7.29
8/10/2020	8/10/2019	8/9/2020	239	0.6263	0.6231	0.0222	2.030	0.10%	1.477	18.54	0.741	7.19
8/11/2020	8/11/2019	8/10/2020	240	0.6264	0.6233	0.0221	2.033	0.11%	1.478	18.58	0.744	7.23

Exhibit 11A**Deutsche Bank AG (US)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
8/12/2020	8/12/2019	8/11/2020	241	0.6266	0.6234	0.0221	2.035	0.11%	1.477	18.61	0.741	7.27
8/13/2020	8/13/2019	8/12/2020	241	0.6303	0.6272	0.0218	2.031	0.14%	1.469	18.79	0.726	7.25
8/14/2020	8/14/2019	8/13/2020	241	0.6312	0.6281	0.0217	2.009	0.12%	1.467	18.81	0.729	7.31
8/17/2020	8/17/2019	8/16/2020	239	0.6343	0.6312	0.0213	2.005	0.13%	1.445	18.85	0.718	7.36
8/18/2020	8/18/2019	8/17/2020	240	0.6343	0.6312	0.0212	2.006	0.13%	1.444	18.88	0.716	7.40
8/19/2020	8/19/2019	8/18/2020	241	0.6344	0.6313	0.0212	2.006	0.12%	1.444	18.92	0.716	7.43
8/20/2020	8/20/2019	8/19/2020	241	0.6339	0.6308	0.0212	2.004	0.13%	1.443	18.88	0.718	7.44
8/21/2020	8/21/2019	8/20/2020	241	0.6338	0.6307	0.0212	2.007	0.12%	1.444	18.87	0.720	7.47
8/24/2020	8/24/2019	8/23/2020	239	0.6326	0.6295	0.0213	1.999	0.11%	1.444	18.75	0.718	7.40
8/25/2020	8/25/2019	8/24/2020	240	0.6336	0.6305	0.0213	2.005	0.12%	1.448	18.82	0.723	7.47
8/26/2020	8/26/2019	8/25/2020	241	0.6336	0.6305	0.0212	2.008	0.12%	1.448	18.86	0.723	7.49
8/27/2020	8/27/2019	8/26/2020	241	0.6325	0.6294	0.0213	2.005	0.12%	1.448	18.83	0.714	7.41
8/28/2020	8/28/2019	8/27/2020	241	0.6318	0.6287	0.0213	2.012	0.11%	1.448	18.82	0.708	7.37
8/31/2020	8/31/2019	8/30/2020	239	0.6324	0.6292	0.0214	2.017	0.12%	1.449	18.76	0.710	7.36
9/1/2020	9/1/2019	8/31/2020	240	0.6327	0.6296	0.0214	2.015	0.10%	1.450	18.76	0.719	7.49
9/2/2020	9/2/2019	9/1/2020	241	0.6327	0.6296	0.0213	2.019	0.10%	1.450	18.80	0.720	7.52
9/3/2020	9/3/2019	9/2/2020	242	0.6313	0.6282	0.0213	2.014	0.09%	1.447	18.77	0.721	7.54
9/4/2020	9/4/2019	9/3/2020	242	0.6324	0.6294	0.0213	2.021	0.10%	1.440	18.79	0.719	7.62
9/8/2020	9/8/2019	9/7/2020	240	0.6309	0.6278	0.0214	2.019	0.11%	1.426	18.49	0.741	7.94
9/9/2020	9/9/2019	9/8/2020	241	0.6324	0.6293	0.0214	2.029	0.10%	1.427	18.60	0.742	7.96
9/10/2020	9/10/2019	9/9/2020	241	0.6311	0.6280	0.0214	2.029	0.08%	1.423	18.58	0.738	7.88
9/11/2020	9/11/2019	9/10/2020	240	0.6307	0.6276	0.0214	2.028	0.07%	1.423	18.54	0.736	7.81
9/14/2020	9/14/2019	9/13/2020	238	0.6300	0.6268	0.0215	2.020	0.07%	1.424	18.45	0.732	7.72
9/15/2020	9/15/2019	9/14/2020	239	0.6300	0.6269	0.0215	2.023	0.06%	1.422	18.49	0.732	7.75
9/16/2020	9/16/2019	9/15/2020	240	0.6307	0.6275	0.0214	2.023	0.05%	1.421	18.50	0.738	7.90
9/17/2020	9/17/2019	9/16/2020	240	0.6306	0.6275	0.0214	2.028	0.07%	1.419	18.48	0.740	7.94
9/18/2020	9/18/2019	9/17/2020	240	0.6306	0.6275	0.0214	2.026	0.07%	1.418	18.48	0.740	7.93
9/21/2020	9/19/2019	9/18/2020	240	0.6318	0.6287	0.0214	2.030	0.08%	1.419	18.53	0.742	7.97
Thereafter	9/19/2019	9/18/2020	240	0.6318	0.6287	0.0214	2.030	0.08%	1.419	18.53	0.742	7.97

[1] Market Index: MSCI World Index (Bloomberg Ticker: "MXWO Index")

[2] Industry Index: See Exhibit 11C.

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
3/14/2017	\$17.20	-1.83%	-0.38%	0.12%	-0.91%	-0.92%	1.82%	-0.51	38.69%
3/15/2017	\$17.20	0.05%	0.61%	-1.02%	-0.19%	0.25%	1.82%	0.14	10.75%
3/16/2017	\$17.50	1.71%	0.54%	-0.34%	0.75%	0.97%	1.81%	0.53	40.48%
3/17/2017	\$16.99	-2.91%	-0.05%	-1.12%	-2.10%	-0.81%	1.81%	-0.45	34.46%
3/20/2017	\$16.41	-3.42%	-0.14%	-0.99%	-2.12%	-1.29%	1.81%	-0.72	52.56%
3/21/2017	\$17.08	4.08%	-0.76%	-1.05%	-3.95%	8.03%	1.81%	4.45	100.00%
3/22/2017	\$17.05	-0.18%	-0.20%	0.17%	-0.33%	0.15%	1.88%	0.08	6.46%
3/23/2017	\$16.91	-0.82%	0.13%	-0.16%	0.02%	-0.84%	1.88%	-0.45	34.56%
3/24/2017	\$16.83	-0.47%	0.05%	-0.09%	-0.09%	-0.38%	1.87%	-0.20	16.21%
3/27/2017	\$16.95	0.71%	-0.04%	0.20%	0.18%	0.54%	1.87%	0.29	22.51%
3/28/2017	\$17.38	2.54%	0.74%	0.11%	2.11%	0.43%	1.87%	0.23	18.11%
3/29/2017	\$17.43	0.29%	-0.11%	-0.31%	-0.85%	1.14%	1.87%	0.61	45.77%
3/30/2017	\$17.26	-0.98%	0.17%	0.69%	1.55%	-2.52%	1.87%	-1.35	82.17%
3/31/2017	\$17.16	-0.58%	-0.34%	-0.40%	-1.59%	1.01%	1.87%	0.54	41.07%
4/3/2017	\$16.70	-2.68%	-0.25%	-0.13%	-0.94%	-1.74%	1.87%	-0.93	64.66%
4/4/2017	\$16.65	-0.30%	0.06%	-0.51%	-0.71%	0.41%	1.87%	0.22	17.30%
4/5/2017	\$16.50	-0.90%	-0.22%	-0.50%	-1.44%	0.54%	1.87%	0.29	22.65%
4/6/2017	\$16.60	0.61%	0.03%	0.26%	0.48%	0.13%	1.87%	0.07	5.38%
4/7/2017	\$16.46	-0.84%	-0.06%	-0.32%	-0.70%	-0.14%	1.87%	-0.08	6.11%
4/10/2017	\$16.47	0.06%	0.07%	-0.47%	-0.58%	0.65%	1.87%	0.34	26.91%
4/11/2017	\$16.32	-0.91%	0.06%	-0.30%	-0.34%	-0.57%	1.87%	-0.30	23.77%
4/12/2017	\$16.19	-0.80%	-0.26%	-0.36%	-1.32%	0.53%	1.87%	0.28	22.15%
4/13/2017	\$15.86	-2.04%	-0.54%	-0.58%	-2.41%	0.37%	1.87%	0.20	15.63%
4/17/2017	\$16.12	1.64%	0.71%	0.36%	2.44%	-0.80%	1.87%	-0.43	33.20%
4/18/2017	\$15.96	-0.99%	-0.48%	-0.16%	-1.56%	0.56%	1.86%	0.30	23.72%
4/19/2017	\$16.08	0.75%	-0.13%	-0.15%	-0.61%	1.36%	1.86%	0.73	53.51%
4/20/2017	\$16.55	2.92%	0.63%	0.40%	2.30%	0.62%	1.86%	0.33	26.11%
4/21/2017	\$16.50	-0.30%	-0.25%	-0.30%	-1.19%	0.88%	1.86%	0.48	36.54%
4/24/2017	\$18.37	11.33%	1.61%	1.43%	6.54%	4.79%	1.86%	2.57	98.93%
4/25/2017	\$18.49	0.65%	0.56%	0.09%	1.66%	-1.01%	1.88%	-0.53	40.65%
4/26/2017	\$18.84	1.89%	0.02%	-0.25%	-0.36%	2.25%	1.88%	1.20	76.79%
4/27/2017	\$18.15	-3.66%	-0.07%	-0.62%	-1.22%	-2.44%	1.88%	-1.30	80.43%
4/28/2017	\$18.07	-0.44%	-0.15%	-0.54%	-1.31%	0.87%	1.88%	0.46	35.69%
5/1/2017	\$18.22	0.83%	0.22%	0.07%	0.71%	0.12%	1.88%	0.06	5.06%
5/2/2017	\$18.27	0.27%	0.19%	-0.35%	-0.04%	0.32%	1.88%	0.17	13.44%
5/3/2017	\$18.47	1.09%	-0.16%	0.81%	0.86%	0.23%	1.87%	0.12	9.88%
5/4/2017	\$18.78	1.68%	0.18%	0.54%	1.37%	0.31%	1.86%	0.17	13.29%
5/5/2017	\$19.35	3.04%	0.54%	-0.78%	0.25%	2.79%	1.86%	1.50	86.46%
5/8/2017	\$19.07	-1.45%	0.03%	-0.42%	-0.57%	-0.88%	1.87%	-0.47	36.26%
5/9/2017	\$18.85	-1.15%	-0.21%	0.01%	-0.53%	-0.63%	1.87%	-0.34	26.31%
5/10/2017	\$19.01	0.85%	0.13%	0.44%	1.09%	-0.24%	1.87%	-0.13	10.30%
5/11/2017	\$18.81	-1.05%	-0.25%	0.04%	-0.59%	-0.46%	1.87%	-0.25	19.48%
5/12/2017	\$18.77	-0.21%	0.09%	-0.04%	0.22%	-0.43%	1.86%	-0.23	18.33%
5/15/2017	\$19.03	1.39%	0.46%	-0.38%	0.68%	0.71%	1.87%	0.38	29.44%
5/16/2017	\$19.27	1.26%	0.24%	0.07%	0.81%	0.46%	1.86%	0.24	19.31%
5/17/2017	\$18.64	-3.27%	-1.24%	-1.62%	-5.99%	2.72%	1.86%	1.46	85.46%
5/18/2017	\$18.68	0.21%	-0.09%	0.30%	0.26%	-0.04%	1.87%	-0.02	1.85%
5/19/2017	\$19.04	3.07%	0.73%	-0.03%	2.01%	1.06%	1.86%	0.57	42.88%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
5/22/2017	\$19.12	0.42%	0.54%	-0.98%	-0.05%	0.47%	1.87%	0.25	19.70%
5/23/2017	\$19.25	0.68%	0.09%	0.73%	1.46%	-0.78%	1.86%	-0.42	32.24%
5/24/2017	\$18.94	-1.61%	0.06%	-0.15%	-0.07%	-1.54%	1.87%	-0.83	59.04%
5/25/2017	\$18.85	-0.48%	0.36%	-0.91%	-0.46%	-0.02%	1.87%	-0.01	0.84%
5/26/2017	\$18.46	-2.07%	-0.12%	-0.02%	-0.39%	-1.68%	1.87%	-0.90	63.07%
5/30/2017	\$17.97	-2.65%	-0.12%	-0.87%	-1.75%	-0.91%	1.87%	-0.48	37.16%
5/31/2017	\$17.48	-2.73%	0.10%	-1.46%	-2.11%	-0.61%	1.87%	-0.33	25.75%
6/1/2017	\$17.65	0.97%	0.59%	-0.12%	1.45%	-0.47%	1.87%	-0.25	19.95%
6/2/2017	\$17.66	0.06%	0.63%	-1.43%	-0.58%	0.64%	1.87%	0.34	26.59%
6/5/2017	\$17.50	-0.91%	-0.18%	0.25%	-0.10%	-0.80%	1.87%	-0.43	33.12%
6/6/2017	\$17.33	-0.97%	-0.29%	0.41%	-0.17%	-0.80%	1.87%	-0.43	33.18%
6/7/2017	\$17.46	0.75%	0.05%	0.93%	1.65%	-0.90%	1.87%	-0.48	36.91%
6/8/2017	\$17.57	0.63%	-0.15%	1.09%	1.35%	-0.72%	1.87%	-0.38	29.86%
6/9/2017	\$17.67	0.57%	-0.07%	1.66%	2.48%	-1.91%	1.87%	-1.02	69.25%
6/12/2017	\$17.36	-1.75%	-0.21%	-0.07%	-0.68%	-1.07%	1.87%	-0.57	43.23%
6/13/2017	\$17.47	0.63%	0.52%	-0.60%	0.51%	0.12%	1.87%	0.07	5.25%
6/14/2017	\$17.34	-0.74%	0.09%	-0.54%	-0.59%	-0.15%	1.87%	-0.08	6.52%
6/15/2017	\$16.79	-3.17%	-0.73%	0.43%	-1.32%	-1.85%	1.87%	-0.99	67.64%
6/16/2017	\$16.82	0.18%	0.35%	-0.63%	-0.03%	0.21%	1.87%	0.11	8.96%
6/19/2017	\$17.22	2.38%	0.69%	0.24%	2.28%	0.10%	1.87%	0.05	4.30%
6/20/2017	\$16.85	-2.15%	-0.72%	-0.07%	-2.14%	-0.01%	1.87%	0.00	0.33%
6/21/2017	\$16.90	0.30%	-0.13%	-0.30%	-0.87%	1.17%	1.86%	0.63	46.82%
6/22/2017	\$16.74	-0.95%	0.08%	-0.68%	-0.88%	-0.06%	1.86%	-0.03	2.77%
6/23/2017	\$16.64	-0.60%	0.18%	-0.56%	-0.42%	-0.17%	1.86%	-0.09	7.40%
6/26/2017	\$16.88	1.44%	0.13%	0.44%	1.01%	0.43%	1.87%	0.23	18.11%
6/27/2017	\$17.51	3.73%	-0.51%	2.07%	2.04%	1.70%	1.86%	0.91	63.69%
6/28/2017	\$17.91	2.28%	0.74%	0.84%	3.17%	-0.89%	1.85%	-0.48	36.84%
6/29/2017	\$18.07	0.89%	-0.63%	2.81%	3.11%	-2.22%	1.84%	-1.20	77.02%
6/30/2017	\$17.79	-1.55%	-0.16%	-0.08%	-0.51%	-1.04%	1.82%	-0.57	43.34%
7/3/2017	\$18.15	2.02%	0.22%	1.39%	2.90%	-0.88%	1.79%	-0.49	37.65%
7/5/2017	\$18.63	2.64%	-0.01%	0.43%	0.71%	1.93%	1.79%	1.08	71.92%
7/6/2017	\$18.89	1.40%	-0.59%	0.48%	-0.77%	2.16%	1.79%	1.21	77.35%
7/7/2017	\$19.05	0.85%	0.22%	0.04%	0.77%	0.08%	1.77%	0.04	3.39%
7/10/2017	\$18.97	-0.42%	0.21%	-0.52%	-0.16%	-0.26%	1.77%	-0.15	11.63%
7/11/2017	\$19.07	0.53%	-0.08%	-0.52%	-0.94%	1.47%	1.76%	0.83	59.34%
7/12/2017	\$18.81	-1.36%	0.90%	-1.52%	0.08%	-1.44%	1.77%	-0.81	58.41%
7/13/2017	\$18.93	0.64%	0.21%	0.27%	1.09%	-0.45%	1.76%	-0.25	20.05%
7/14/2017	\$18.86	-0.37%	0.58%	-1.67%	-1.12%	0.75%	1.76%	0.42	32.85%
7/17/2017	\$18.79	-0.37%	0.03%	-0.70%	-0.97%	0.60%	1.77%	0.34	26.66%
7/18/2017	\$18.50	-1.54%	0.06%	-0.49%	-0.55%	-0.99%	1.76%	-0.56	42.45%
7/19/2017	\$18.38	-0.65%	0.46%	-0.54%	0.37%	-1.02%	1.77%	-0.58	43.43%
7/20/2017	\$18.46	0.44%	0.24%	-0.55%	-0.20%	0.63%	1.76%	0.36	28.05%
7/21/2017	\$18.22	-1.30%	-0.23%	-0.30%	-0.98%	-0.32%	1.76%	-0.18	14.49%
7/24/2017	\$18.67	2.47%	-0.20%	0.87%	0.99%	1.48%	1.75%	0.84	60.02%
7/25/2017	\$19.04	1.98%	0.29%	1.40%	3.13%	-1.15%	1.75%	-0.65	48.69%
7/26/2017	\$19.06	0.10%	0.07%	-0.58%	-0.67%	0.78%	1.75%	0.44	34.29%
7/27/2017	\$18.03	-5.40%	0.08%	-0.77%	-0.95%	-4.46%	1.75%	-2.55	98.85%
7/28/2017	\$18.19	0.89%	-0.16%	0.05%	-0.24%	1.12%	1.75%	0.64	47.87%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
7/31/2017	\$17.84	-1.92%	0.04%	0.52%	1.07%	-3.00%	1.75%	-1.71	91.20%
8/1/2017	\$18.13	1.63%	0.47%	0.62%	2.31%	-0.68%	1.76%	-0.39	30.14%
8/2/2017	\$18.01	-0.66%	-0.01%	-0.25%	-0.30%	-0.37%	1.76%	-0.21	16.47%
8/3/2017	\$18.06	0.28%	-0.08%	-0.43%	-0.76%	1.04%	1.75%	0.59	44.64%
8/4/2017	\$18.33	1.49%	-0.05%	1.07%	1.76%	-0.26%	1.75%	-0.15	11.96%
8/7/2017	\$18.23	-0.55%	0.20%	-0.24%	0.23%	-0.77%	1.75%	-0.44	34.18%
8/8/2017	\$17.99	-1.32%	-0.25%	-0.22%	-0.86%	-0.45%	1.75%	-0.26	20.49%
8/9/2017	\$17.58	-2.28%	-0.25%	-0.25%	-0.92%	-1.36%	1.74%	-0.78	56.42%
8/10/2017	\$16.86	-4.10%	-1.10%	-0.58%	-3.57%	-0.52%	1.74%	-0.30	23.46%
8/11/2017	\$17.05	1.13%	-0.13%	-0.65%	-1.33%	2.46%	1.72%	1.43	84.68%
8/14/2017	\$17.29	1.41%	0.77%	0.09%	2.18%	-0.77%	1.73%	-0.45	34.45%
8/15/2017	\$17.13	-0.93%	-0.17%	0.21%	0.01%	-0.94%	1.72%	-0.54	41.25%
8/16/2017	\$17.04	-0.53%	0.25%	-0.86%	-0.72%	0.19%	1.72%	0.11	8.78%
8/17/2017	\$16.44	-3.52%	-0.91%	-0.72%	-3.40%	-0.12%	1.72%	-0.07	5.55%
8/18/2017	\$16.52	0.49%	-0.31%	0.56%	0.25%	0.24%	1.72%	0.14	11.14%
8/21/2017	\$16.17	-2.12%	0.09%	-0.78%	-0.96%	-1.15%	1.72%	-0.67	49.79%
8/22/2017	\$16.30	0.80%	0.67%	-0.14%	1.54%	-0.74%	1.72%	-0.43	33.21%
8/23/2017	\$16.27	-0.18%	-0.16%	0.00%	-0.31%	0.12%	1.72%	0.07	5.69%
8/24/2017	\$16.28	0.06%	-0.13%	0.28%	0.22%	-0.16%	1.71%	-0.09	7.36%
8/25/2017	\$16.42	0.86%	0.25%	-0.12%	0.51%	0.35%	1.71%	0.21	16.33%
8/28/2017	\$16.40	-0.12%	0.09%	-0.33%	-0.25%	0.13%	1.71%	0.08	6.00%
8/29/2017	\$16.04	-2.19%	-0.06%	-0.46%	-0.85%	-1.34%	1.71%	-0.79	56.82%
8/30/2017	\$16.01	-0.19%	0.13%	0.19%	0.70%	-0.89%	1.71%	-0.52	39.76%
8/31/2017	\$15.99	-0.12%	0.63%	-0.96%	0.03%	-0.16%	1.70%	-0.09	7.36%
9/1/2017	\$16.06	0.44%	0.31%	0.06%	0.91%	-0.47%	1.70%	-0.28	21.87%
9/5/2017	\$15.66	-2.49%	-0.57%	-1.61%	-4.06%	1.57%	1.71%	0.92	64.19%
9/6/2017	\$15.99	2.11%	0.23%	0.05%	0.69%	1.42%	1.70%	0.83	59.37%
9/7/2017	\$15.92	-0.44%	0.28%	-1.67%	-1.96%	1.52%	1.70%	0.89	62.66%
9/8/2017	\$16.00	0.50%	0.00%	0.22%	0.39%	0.11%	1.71%	0.07	5.23%
9/11/2017	\$16.34	2.12%	0.89%	0.16%	2.89%	-0.76%	1.68%	-0.46	35.08%
9/12/2017	\$16.98	3.92%	0.32%	1.18%	2.76%	1.16%	1.68%	0.69	50.87%
9/13/2017	\$16.78	-1.18%	-0.08%	0.37%	0.33%	-1.51%	1.67%	-0.90	63.31%
9/14/2017	\$16.68	-0.60%	-0.17%	0.12%	-0.33%	-0.27%	1.68%	-0.16	12.66%
9/15/2017	\$16.54	-0.84%	0.22%	-0.19%	0.36%	-1.20%	1.68%	-0.71	52.42%
9/18/2017	\$16.57	0.18%	0.14%	0.92%	1.85%	-1.67%	1.63%	-1.02	69.30%
9/19/2017	\$16.56	-0.06%	0.28%	0.25%	1.22%	-1.28%	1.63%	-0.78	56.42%
9/20/2017	\$16.38	-1.09%	0.13%	-0.05%	0.35%	-1.43%	1.62%	-0.89	62.35%
9/21/2017	\$16.69	1.89%	-0.42%	1.12%	0.51%	1.38%	1.60%	0.87	61.27%
9/22/2017	\$16.63	-0.36%	0.21%	-0.51%	-0.08%	-0.28%	1.60%	-0.17	13.86%
9/25/2017	\$16.04	-3.55%	-0.28%	-0.75%	-1.90%	-1.65%	1.60%	-1.03	69.73%
9/26/2017	\$16.02	-0.12%	-0.29%	0.18%	-0.55%	0.42%	1.60%	0.26	20.82%
9/27/2017	\$16.57	3.43%	0.24%	1.29%	2.73%	0.70%	1.58%	0.44	34.16%
9/28/2017	\$16.98	2.47%	0.22%	-0.07%	0.62%	1.86%	1.58%	1.17	75.76%
9/29/2017	\$17.28	1.77%	0.41%	-0.53%	0.47%	1.30%	1.58%	0.82	58.75%
10/2/2017	\$17.09	-1.10%	0.21%	0.20%	0.92%	-2.02%	1.43%	-1.41	83.99%
10/3/2017	\$17.07	-0.12%	0.25%	0.16%	0.96%	-1.07%	1.43%	-0.75	54.57%
10/4/2017	\$16.79	-1.64%	0.07%	-0.94%	-1.06%	-0.58%	1.43%	-0.40	31.24%
10/5/2017	\$17.22	2.56%	0.26%	0.77%	1.81%	0.75%	1.43%	0.52	39.98%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
10/6/2017	\$17.21	-0.06%	-0.11%	0.05%	-0.18%	0.12%	1.43%	0.08	6.71%
10/9/2017	\$16.87	-1.98%	-0.04%	-0.64%	-0.97%	-1.00%	1.43%	-0.70	51.40%
10/10/2017	\$16.99	0.71%	0.42%	0.02%	1.22%	-0.51%	1.43%	-0.35	27.61%
10/11/2017	\$16.92	-0.41%	0.15%	-0.75%	-0.62%	0.21%	1.43%	0.15	11.52%
10/12/2017	\$16.70	-1.30%	-0.04%	-1.26%	-1.86%	0.56%	1.43%	0.39	30.28%
10/13/2017	\$16.58	-0.72%	0.22%	-0.30%	0.20%	-0.92%	1.43%	-0.64	47.99%
10/16/2017	\$16.72	0.84%	0.09%	0.64%	1.15%	-0.31%	1.43%	-0.21	16.96%
10/17/2017	\$16.71	-0.06%	-0.12%	0.04%	-0.29%	0.23%	1.43%	0.16	12.51%
10/18/2017	\$16.89	1.08%	0.15%	0.58%	1.24%	-0.16%	1.43%	-0.11	9.05%
10/19/2017	\$16.87	-0.12%	0.14%	-0.24%	0.07%	-0.18%	1.43%	-0.13	10.20%
10/20/2017	\$16.98	0.65%	0.11%	0.99%	1.70%	-1.05%	1.43%	-0.73	53.41%
10/23/2017	\$16.63	-2.06%	-0.27%	0.03%	-0.74%	-1.32%	1.42%	-0.93	64.64%
10/24/2017	\$17.18	3.31%	0.07%	1.02%	1.57%	1.74%	1.42%	1.22	77.75%
10/25/2017	\$17.12	-0.35%	-0.39%	0.43%	-0.51%	0.16%	1.43%	0.11	8.99%
10/26/2017	\$16.72	-2.34%	0.11%	-0.38%	-0.22%	-2.12%	1.42%	-1.49	86.22%
10/27/2017	\$16.32	-2.39%	0.44%	-0.70%	0.26%	-2.66%	1.42%	-1.87	93.68%
10/30/2017	\$16.26	-0.37%	0.00%	-0.37%	-0.55%	0.18%	1.43%	0.13	10.20%
10/31/2017	\$16.27	0.06%	0.11%	-0.84%	-0.89%	0.95%	1.43%	0.67	49.35%
11/1/2017	\$16.56	1.78%	0.21%	-0.39%	0.04%	1.75%	1.43%	1.22	77.76%
11/2/2017	\$17.06	3.02%	0.10%	0.60%	1.11%	1.91%	1.42%	1.34	82.01%
11/3/2017	\$16.82	-1.41%	0.11%	-0.75%	-0.73%	-0.67%	1.43%	-0.47	36.33%
11/6/2017	\$16.83	0.06%	0.07%	-0.65%	-0.73%	0.79%	1.43%	0.55	41.84%
11/7/2017	\$16.68	-0.89%	0.00%	-1.47%	-2.06%	1.17%	1.43%	0.82	58.59%
11/8/2017	\$17.04	2.16%	0.19%	-0.88%	-0.71%	2.87%	1.43%	2.00	95.39%
11/9/2017	\$17.41	2.17%	-0.41%	0.48%	-0.46%	2.63%	1.44%	1.82	93.08%
11/10/2017	\$17.94	3.04%	-0.10%	0.19%	-0.01%	3.06%	1.45%	2.11	96.43%
11/13/2017	\$17.93	-0.06%	-0.22%	0.06%	-0.54%	0.48%	1.45%	0.33	25.91%
11/14/2017	\$18.19	1.45%	-0.19%	-0.05%	-0.59%	2.04%	1.45%	1.41	83.96%
11/15/2017	\$18.48	1.59%	-0.53%	1.74%	1.00%	0.59%	1.45%	0.41	31.76%
11/16/2017	\$19.04	3.03%	0.73%	-1.12%	0.35%	2.68%	1.45%	1.85	93.52%
11/17/2017	\$19.13	0.47%	-0.13%	-0.09%	-0.46%	0.93%	1.46%	0.64	47.56%
11/20/2017	\$19.17	0.21%	0.13%	0.29%	0.76%	-0.55%	1.46%	-0.38	29.26%
11/21/2017	\$19.01	-0.83%	0.56%	-0.78%	0.42%	-1.26%	1.45%	-0.86	61.20%
11/22/2017	\$18.91	-0.53%	0.14%	-0.05%	0.31%	-0.84%	1.46%	-0.58	43.42%
11/24/2017	\$19.19	1.48%	0.46%	-0.62%	0.37%	1.12%	1.45%	0.77	55.60%
11/27/2017	\$18.74	-2.35%	-0.18%	-0.21%	-0.77%	-1.58%	1.46%	-1.08	72.08%
11/28/2017	\$18.88	0.75%	0.52%	1.91%	4.12%	-3.37%	1.46%	-2.32	97.86%
11/29/2017	\$19.00	0.64%	-0.02%	1.40%	1.88%	-1.25%	1.47%	-0.85	60.30%
11/30/2017	\$18.86	-0.74%	0.54%	-0.61%	0.63%	-1.37%	1.47%	-0.93	64.79%
12/1/2017	\$18.98	0.64%	-0.38%	0.70%	-0.07%	0.71%	1.47%	0.48	36.86%
12/4/2017	\$19.12	0.74%	0.03%	1.58%	2.24%	-1.50%	1.47%	-1.02	69.21%
12/5/2017	\$18.76	-1.88%	-0.31%	-0.46%	-1.42%	-0.47%	1.47%	-0.32	24.78%
12/6/2017	\$18.50	-1.39%	-0.26%	-0.50%	-1.35%	-0.03%	1.46%	-0.02	1.78%
12/7/2017	\$18.85	1.89%	0.26%	-0.27%	0.26%	1.63%	1.41%	1.16	75.26%
12/8/2017	\$19.38	2.81%	0.48%	0.74%	2.09%	0.72%	1.41%	0.51	38.87%
12/11/2017	\$19.30	-0.41%	0.38%	-0.42%	0.44%	-0.85%	1.39%	-0.61	45.91%
12/12/2017	\$19.38	0.41%	0.11%	0.67%	1.08%	-0.66%	1.39%	-0.48	36.60%
12/13/2017	\$19.33	-0.26%	0.04%	-0.66%	-0.74%	0.48%	1.38%	0.35	27.21%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
12/14/2017	\$19.23	-0.52%	-0.33%	-0.27%	-1.19%	0.68%	1.38%	0.49	37.56%
12/15/2017	\$19.43	1.04%	0.38%	-0.17%	0.76%	0.29%	1.38%	0.21	16.38%
12/18/2017	\$20.10	3.45%	0.89%	-0.35%	1.86%	1.59%	1.38%	1.15	74.97%
12/19/2017	\$19.85	-1.24%	-0.37%	0.27%	-0.67%	-0.57%	1.38%	-0.42	32.20%
12/20/2017	\$19.71	-0.71%	-0.04%	0.04%	-0.09%	-0.62%	1.36%	-0.45	34.92%
12/21/2017	\$19.70	-0.05%	0.25%	0.86%	1.70%	-1.75%	1.35%	-1.30	80.57%
12/22/2017	\$19.38	-1.62%	-0.06%	-0.03%	-0.23%	-1.39%	1.35%	-1.03	69.74%
12/26/2017	\$19.23	-0.77%	-0.01%	-0.36%	-0.52%	-0.25%	1.35%	-0.19	14.86%
12/27/2017	\$19.06	-0.88%	0.18%	-0.36%	0.01%	-0.89%	1.35%	-0.66	48.99%
12/28/2017	\$19.10	0.21%	0.18%	0.12%	0.57%	-0.36%	1.35%	-0.27	21.23%
12/29/2017	\$19.03	-0.37%	-0.16%	-0.29%	-0.83%	0.46%	1.35%	0.34	26.62%
1/2/2018	\$19.33	1.58%	0.60%	-0.11%	1.43%	0.15%	1.35%	0.11	8.92%
1/3/2018	\$19.16	-0.88%	0.45%	-0.62%	0.41%	-1.29%	1.35%	-0.96	66.22%
1/4/2018	\$19.77	3.18%	0.80%	-0.12%	1.93%	1.25%	1.35%	0.93	64.69%
1/5/2018	\$18.55	-6.17%	0.65%	-1.24%	0.07%	-6.25%	1.33%	-4.71	100.00%
1/8/2018	\$18.30	-1.35%	0.06%	-0.44%	-0.48%	-0.87%	1.39%	-0.63	46.86%
1/9/2018	\$18.13	-0.93%	0.18%	0.35%	0.80%	-1.73%	1.38%	-1.25	78.71%
1/10/2018	\$18.50	2.04%	0.02%	1.24%	1.55%	0.49%	1.39%	0.35	27.32%
1/11/2018	\$18.56	0.32%	0.44%	-0.08%	0.91%	-0.58%	1.38%	-0.42	32.83%
1/12/2018	\$18.70	0.75%	0.62%	0.51%	2.11%	-1.36%	1.37%	-0.99	67.54%
1/16/2018	\$18.51	-1.02%	0.14%	-0.28%	-0.08%	-0.94%	1.37%	-0.68	50.34%
1/17/2018	\$18.52	0.05%	0.53%	-0.49%	0.60%	-0.54%	1.37%	-0.40	30.80%
1/18/2018	\$18.53	0.05%	-0.15%	0.53%	0.24%	-0.19%	1.37%	-0.14	10.94%
1/19/2018	\$18.78	1.35%	0.49%	-0.31%	0.71%	0.63%	1.37%	0.46	35.57%
1/22/2018	\$19.39	3.25%	0.62%	-0.04%	1.38%	1.87%	1.37%	1.37	82.71%
1/23/2018	\$19.47	0.41%	0.41%	-0.65%	0.11%	0.30%	1.37%	0.22	17.50%
1/24/2018	\$19.74	1.39%	0.10%	0.66%	0.99%	0.40%	1.37%	0.29	22.80%
1/25/2018	\$19.64	-0.51%	0.09%	-0.17%	-0.07%	-0.44%	1.37%	-0.32	24.95%
1/26/2018	\$19.51	-0.66%	0.65%	-0.37%	1.00%	-1.66%	1.36%	-1.22	77.54%
1/29/2018	\$19.10	-2.10%	-0.65%	0.59%	-0.90%	-1.20%	1.37%	-0.88	61.78%
1/30/2018	\$18.38	-3.77%	-0.90%	0.19%	-1.99%	-1.78%	1.37%	-1.30	80.52%
1/31/2018	\$18.34	-0.22%	-0.04%	0.13%	-0.05%	-0.17%	1.37%	-0.13	9.97%
2/1/2018	\$18.65	1.69%	-0.03%	1.10%	1.19%	0.50%	1.37%	0.36	28.45%
2/2/2018	\$17.09	-8.36%	-1.85%	0.64%	-3.77%	-4.60%	1.36%	-3.37	99.91%
2/5/2018	\$16.39	-4.10%	-3.13%	0.39%	-7.08%	2.98%	1.37%	2.18	97.00%
2/6/2018	\$16.52	0.79%	-0.23%	2.41%	2.46%	-1.67%	1.37%	-1.21	77.38%
2/7/2018	\$16.09	-2.60%	0.11%	-0.29%	-0.20%	-2.40%	1.38%	-1.74	91.74%
2/8/2018	\$15.49	-3.73%	-2.67%	0.42%	-5.19%	1.46%	1.38%	1.05	70.73%
2/9/2018	\$15.58	0.58%	0.29%	1.10%	1.88%	-1.30%	1.39%	-0.94	64.97%
2/12/2018	\$16.01	2.76%	1.22%	-0.52%	1.80%	0.96%	1.39%	0.69	50.99%
2/13/2018	\$15.90	-0.69%	0.23%	0.01%	0.43%	-1.12%	1.39%	-0.81	57.94%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
2/14/2018	\$16.26	2.26%	1.21%	0.78%	3.36%	-1.09%	1.39%	-0.79	56.85%
2/15/2018	\$16.11	-0.92%	1.19%	-1.14%	0.98%	-1.90%	1.39%	-1.37	82.72%
2/16/2018	\$16.08	-0.19%	0.33%	-0.83%	-0.44%	0.26%	1.39%	0.18	14.65%
2/20/2018	\$16.46	2.36%	-0.55%	0.02%	-1.11%	3.47%	1.39%	2.49	98.66%
2/21/2018	\$16.57	0.67%	-0.37%	0.73%	0.14%	0.53%	1.41%	0.38	29.40%
2/22/2018	\$16.43	-0.85%	-0.06%	-0.18%	-0.37%	-0.47%	1.41%	-0.34	26.42%
2/23/2018	\$16.43	0.00%	1.12%	-0.46%	1.52%	-1.52%	1.41%	-1.08	72.00%
2/26/2018	\$16.48	0.30%	0.88%	-0.54%	0.91%	-0.61%	1.41%	-0.43	33.37%
2/27/2018	\$16.40	-0.49%	-0.88%	0.17%	-1.45%	0.97%	1.41%	0.69	50.71%
2/28/2018	\$15.94	-2.80%	-1.05%	0.36%	-1.52%	-1.28%	1.40%	-0.91	63.85%
3/1/2018	\$15.70	-1.51%	-1.32%	0.39%	-2.01%	0.50%	1.40%	0.36	27.77%
3/2/2018	\$15.79	0.57%	-0.01%	-0.05%	-0.14%	0.71%	1.40%	0.51	38.72%
3/5/2018	\$15.89	0.63%	0.80%	-0.39%	0.88%	-0.25%	1.36%	-0.18	14.43%
3/6/2018	\$16.06	1.07%	0.53%	-0.49%	0.27%	0.80%	1.36%	0.59	44.53%
3/7/2018	\$16.33	1.68%	-0.08%	-0.07%	-0.26%	1.94%	1.35%	1.44	84.85%
3/8/2018	\$16.18	-0.92%	0.44%	-0.64%	-0.05%	-0.87%	1.35%	-0.64	47.89%
3/9/2018	\$16.12	-0.37%	1.13%	0.06%	1.99%	-2.36%	1.36%	-1.74	91.70%
3/12/2018	\$16.11	-0.06%	0.23%	-0.28%	-0.01%	-0.05%	1.35%	-0.04	3.22%
3/13/2018	\$15.79	-1.99%	-0.45%	-0.63%	-1.57%	-0.41%	1.34%	-0.31	24.15%
3/14/2018	\$15.70	-0.57%	-0.47%	-0.38%	-1.32%	0.75%	1.34%	0.56	42.10%
3/15/2018	\$15.70	0.00%	-0.05%	0.27%	0.20%	-0.20%	1.34%	-0.15	11.59%
3/16/2018	\$15.82	0.76%	0.03%	0.29%	0.37%	0.39%	1.34%	0.29	23.00%
3/19/2018	\$15.54	-1.77%	-1.11%	1.04%	-0.58%	-1.19%	1.34%	-0.89	62.47%
3/20/2018	\$15.52	-0.13%	0.02%	-0.11%	-0.12%	-0.01%	1.34%	0.00	0.34%
3/21/2018	\$14.79	-4.70%	-0.08%	-0.13%	-0.31%	-4.40%	1.33%	-3.29	99.89%
3/22/2018	\$14.19	-4.06%	-1.72%	-1.55%	-5.02%	0.97%	1.29%	0.75	54.65%
3/23/2018	\$13.75	-3.10%	-1.76%	-0.29%	-3.51%	0.41%	1.29%	0.32	24.92%
3/26/2018	\$14.07	2.33%	1.60%	0.75%	3.69%	-1.37%	1.29%	-1.06	70.96%
3/27/2018	\$13.77	-2.13%	-0.66%	-1.15%	-2.67%	0.54%	1.29%	0.42	32.34%
3/28/2018	\$13.76	-0.07%	-0.38%	0.58%	0.00%	-0.07%	1.29%	-0.06	4.47%
3/29/2018	\$13.98	1.60%	0.87%	-0.33%	1.02%	0.58%	1.29%	0.45	34.58%
4/2/2018	\$13.68	-2.15%	-1.31%	0.35%	-1.90%	-0.25%	1.28%	-0.20	15.45%
4/3/2018	\$13.72	0.29%	0.50%	0.12%	0.96%	-0.67%	1.28%	-0.52	39.89%
4/4/2018	\$13.88	1.17%	0.61%	-0.07%	0.90%	0.26%	1.28%	0.21	16.33%
4/5/2018	\$14.32	3.17%	0.94%	-0.20%	1.31%	1.86%	1.28%	1.46	85.43%
4/6/2018	\$13.87	-3.14%	-1.34%	-0.07%	-2.49%	-0.65%	1.28%	-0.51	38.92%
4/9/2018	\$14.01	1.01%	0.41%	0.34%	1.10%	-0.09%	1.28%	-0.07	5.63%
4/10/2018	\$14.08	0.50%	1.40%	-0.34%	1.98%	-1.48%	1.28%	-1.16	75.21%
4/11/2018	\$14.19	0.78%	-0.36%	-0.63%	-1.49%	2.27%	1.28%	1.76	92.11%
4/12/2018	\$14.41	1.55%	0.40%	1.49%	2.52%	-0.96%	1.29%	-0.75	54.40%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
4/13/2018	\$14.38	-0.21%	-0.09%	-1.60%	-2.21%	2.00%	1.29%	1.55	87.69%
4/16/2018	\$14.33	-0.35%	0.52%	-0.82%	-0.16%	-0.19%	1.30%	-0.14	11.34%
4/17/2018	\$14.38	0.35%	0.79%	-1.08%	-0.02%	0.37%	1.30%	0.28	22.26%
4/18/2018	\$14.44	0.42%	0.35%	-1.28%	-1.03%	1.45%	1.30%	1.11	73.38%
4/19/2018	\$14.46	0.14%	-0.37%	2.26%	2.07%	-1.93%	1.30%	-1.49	86.15%
4/20/2018	\$14.26	-1.38%	-0.77%	0.97%	-0.20%	-1.19%	1.30%	-0.91	63.72%
4/23/2018	\$14.25	-0.07%	-0.12%	-0.10%	-0.37%	0.30%	1.31%	0.23	18.45%
4/24/2018	\$14.78	3.72%	-0.75%	0.45%	-0.79%	4.51%	1.30%	3.46	99.94%
4/25/2018	\$14.60	-1.22%	-0.23%	0.27%	-0.10%	-1.12%	1.27%	-0.88	62.12%
4/26/2018	\$14.34	-1.78%	0.76%	-1.15%	-0.21%	-1.57%	1.27%	-1.24	78.22%
4/27/2018	\$13.89	-3.14%	0.17%	-0.46%	-0.32%	-2.82%	1.27%	-2.23	97.33%
4/30/2018	\$13.66	-1.66%	-0.46%	-0.05%	-0.80%	-0.86%	1.28%	-0.67	49.89%
5/1/2018	\$13.59	-0.51%	-0.13%	-0.06%	-0.34%	-0.17%	1.28%	-0.13	10.58%
5/2/2018	\$13.63	0.29%	-0.34%	-0.22%	-0.82%	1.12%	1.28%	0.88	61.87%
5/3/2018	\$13.63	0.00%	-0.26%	-0.32%	-0.82%	0.82%	1.28%	0.64	47.60%
5/4/2018	\$13.78	1.10%	0.87%	-1.23%	-0.17%	1.27%	1.28%	0.99	67.73%
5/7/2018	\$13.78	0.00%	0.36%	0.07%	0.48%	-0.48%	1.27%	-0.38	29.46%
5/8/2018	\$13.59	-1.38%	-0.09%	0.98%	0.83%	-2.21%	1.27%	-1.75	91.81%
5/9/2018	\$13.78	1.40%	0.70%	1.05%	2.02%	-0.62%	1.27%	-0.49	37.34%
5/10/2018	\$13.88	0.73%	0.65%	-0.19%	0.63%	0.09%	1.27%	0.07	5.91%
5/11/2018	\$13.86	-0.14%	0.40%	-0.42%	0.01%	-0.16%	1.27%	-0.13	9.95%
5/14/2018	\$13.65	-1.51%	0.19%	-0.20%	-0.04%	-1.47%	1.28%	-1.16	75.14%
5/15/2018	\$13.29	-2.64%	-0.75%	0.69%	-0.46%	-2.18%	1.28%	-1.71	91.11%
5/16/2018	\$13.00	-2.18%	0.14%	-0.56%	-0.51%	-1.67%	1.28%	-1.30	80.60%
5/17/2018	\$12.99	-0.08%	0.12%	-0.71%	-0.71%	0.63%	1.29%	0.49	37.49%
5/18/2018	\$12.71	-2.16%	-0.22%	-1.04%	-1.56%	-0.60%	1.28%	-0.46	35.74%
5/21/2018	\$12.71	0.00%	0.47%	0.04%	0.55%	-0.55%	1.28%	-0.43	33.20%
5/22/2018	\$12.97	2.05%	-0.09%	1.12%	0.92%	1.12%	1.28%	0.88	61.89%
5/23/2018	\$12.88	-0.69%	-0.28%	-0.88%	-1.47%	0.78%	1.28%	0.61	45.49%
5/24/2018	\$12.25	-4.89%	-0.24%	-0.64%	-1.17%	-3.72%	1.28%	-2.90	99.59%
5/25/2018	\$12.05	-0.60%	-0.33%	-0.18%	-0.82%	0.22%	1.30%	0.17	13.48%
5/29/2018	\$11.30	-6.22%	-1.30%	-2.63%	-4.85%	-1.37%	1.30%	-1.05	70.68%
5/30/2018	\$11.57	2.39%	0.82%	0.65%	1.78%	0.61%	1.30%	0.47	35.87%
5/31/2018	\$11.08	-4.23%	-0.36%	-0.46%	-1.19%	-3.05%	1.30%	-2.35	98.03%
6/1/2018	\$11.04	-0.36%	0.78%	0.18%	1.22%	-1.58%	1.31%	-1.20	77.01%
6/4/2018	\$11.21	1.54%	0.60%	-0.59%	0.09%	1.45%	1.32%	1.10	72.69%
6/5/2018	\$11.03	-1.61%	-0.12%	-0.89%	-1.31%	-0.29%	1.32%	-0.22	17.55%
6/6/2018	\$11.35	2.90%	0.82%	1.13%	2.33%	0.57%	1.32%	0.43	33.40%
6/7/2018	\$11.51	1.41%	0.04%	0.08%	0.00%	1.41%	1.32%	1.07	71.57%
6/8/2018	\$11.25	-2.26%	0.01%	-0.13%	-0.28%	-1.98%	1.32%	-1.50	86.49%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
6/11/2018	\$11.43	1.60%	0.30%	-0.11%	0.17%	1.43%	1.33%	1.08	71.74%
6/12/2018	\$11.41	-0.17%	0.05%	-0.60%	-0.75%	0.58%	1.33%	0.44	33.67%
6/13/2018	\$11.37	-0.35%	-0.24%	0.11%	-0.40%	0.05%	1.33%	0.04	2.87%
6/14/2018	\$11.22	-1.32%	0.09%	-1.28%	-1.46%	0.14%	1.33%	0.11	8.48%
6/15/2018	\$11.10	-1.07%	-0.37%	-0.20%	-0.94%	-0.13%	1.33%	-0.10	8.02%
6/18/2018	\$11.08	-0.18%	-0.39%	0.57%	-0.09%	-0.09%	1.32%	-0.07	5.39%
6/19/2018	\$11.17	0.81%	-0.68%	0.33%	-0.79%	1.60%	1.32%	1.21	77.36%
6/20/2018	\$11.08	-0.81%	0.30%	-0.28%	-0.02%	-0.79%	1.32%	-0.60	44.80%
6/21/2018	\$10.89	-1.72%	-0.56%	0.39%	-0.52%	-1.19%	1.32%	-0.90	63.21%
6/22/2018	\$11.01	1.10%	0.43%	-0.85%	-0.48%	1.58%	1.32%	1.20	76.77%
6/25/2018	\$10.89	-1.09%	-1.39%	0.29%	-1.86%	0.77%	1.33%	0.58	43.88%
6/26/2018	\$10.78	-1.01%	0.14%	0.05%	0.13%	-1.14%	1.33%	-0.86	60.75%
6/27/2018	\$10.38	-3.71%	-0.58%	-0.77%	-1.84%	-1.87%	1.33%	-1.41	83.96%
6/28/2018	\$10.47	0.87%	0.16%	1.18%	1.35%	-0.49%	1.32%	-0.37	28.69%
6/29/2018	\$10.62	1.43%	0.47%	-1.07%	-0.63%	2.07%	1.32%	1.56	88.02%
7/2/2018	\$10.64	0.19%	-0.35%	0.57%	-0.08%	0.26%	1.33%	0.20	15.71%
7/3/2018	\$10.70	0.56%	0.00%	-0.94%	-1.20%	1.77%	1.33%	1.33	81.52%
7/5/2018	\$11.13	4.02%	0.68%	-0.05%	0.79%	3.23%	1.33%	2.42	98.39%
7/6/2018	\$11.46	2.96%	0.84%	-0.72%	0.34%	2.62%	1.34%	1.96	94.83%
7/9/2018	\$11.54	0.70%	0.82%	1.38%	2.54%	-1.84%	1.35%	-1.37	82.78%
7/10/2018	\$11.43	-0.95%	0.22%	-1.06%	-0.92%	-0.03%	1.35%	-0.03	2.00%
7/11/2018	\$11.15	-2.45%	-0.87%	0.33%	-1.21%	-1.24%	1.35%	-0.92	64.12%
7/12/2018	\$11.20	0.45%	0.64%	-0.23%	0.58%	-0.13%	1.35%	-0.10	7.59%
7/13/2018	\$11.24	0.36%	0.18%	-0.87%	-0.78%	1.14%	1.35%	0.84	60.06%
7/16/2018	\$12.14	8.01%	-0.08%	3.07%	2.76%	5.25%	1.35%	3.89	99.99%
7/17/2018	\$11.87	-2.22%	0.25%	-0.56%	-0.38%	-1.85%	1.39%	-1.33	81.58%
7/18/2018	\$12.08	1.77%	0.19%	0.38%	0.58%	1.19%	1.39%	0.86	60.86%
7/19/2018	\$12.02	-0.50%	-0.35%	-0.75%	-1.54%	1.04%	1.39%	0.75	54.67%
7/20/2018	\$12.03	0.08%	0.20%	0.70%	0.97%	-0.88%	1.39%	-0.63	47.35%
7/23/2018	\$12.18	1.25%	0.01%	1.47%	1.52%	-0.28%	1.39%	-0.20	15.73%
7/24/2018	\$12.28	0.82%	0.54%	0.30%	1.07%	-0.25%	1.39%	-0.18	14.10%
7/25/2018	\$12.18	-0.81%	0.50%	-0.02%	0.62%	-1.44%	1.39%	-1.04	69.92%
7/26/2018	\$12.20	0.16%	0.01%	-0.48%	-0.67%	0.83%	1.39%	0.60	44.94%
7/27/2018	\$12.42	1.80%	-0.27%	1.06%	0.60%	1.21%	1.39%	0.87	61.43%
7/30/2018	\$12.79	2.98%	-0.36%	1.14%	0.54%	2.44%	1.39%	1.75	91.92%
7/31/2018	\$13.06	2.11%	0.23%	-0.84%	-0.73%	2.84%	1.40%	2.03	95.70%
8/1/2018	\$12.95	-0.84%	-0.17%	0.25%	-0.11%	-0.74%	1.40%	-0.53	40.15%
8/2/2018	\$12.54	-3.17%	-0.08%	-0.34%	-0.63%	-2.53%	1.40%	-1.81	92.86%
8/3/2018	\$12.50	-0.32%	0.36%	0.28%	0.76%	-1.08%	1.41%	-0.77	55.50%
8/6/2018	\$12.52	0.16%	0.09%	-0.57%	-0.64%	0.80%	1.41%	0.57	43.07%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
8/7/2018	\$12.62	0.80%	0.44%	-0.24%	0.28%	0.51%	1.41%	0.37	28.47%
8/8/2018	\$12.52	-0.79%	-0.03%	0.63%	0.52%	-1.31%	1.41%	-0.93	64.81%
8/9/2018	\$12.40	-0.96%	-0.11%	-0.62%	-1.01%	0.05%	1.41%	0.03	2.75%
8/10/2018	\$11.82	-4.68%	-1.10%	-0.29%	-2.18%	-2.49%	1.41%	-1.77	92.24%
8/13/2018	\$11.45	-3.13%	-0.58%	-0.80%	-1.95%	-1.18%	1.41%	-0.84	59.59%
8/14/2018	\$11.49	0.35%	0.46%	0.01%	0.61%	-0.26%	1.41%	-0.18	14.53%
8/15/2018	\$11.19	-2.61%	-1.01%	0.05%	-1.70%	-0.91%	1.41%	-0.64	47.94%
8/16/2018	\$11.21	0.18%	0.73%	-0.09%	0.91%	-0.73%	1.41%	-0.52	39.62%
8/17/2018	\$11.20	-0.09%	0.33%	-0.41%	-0.09%	0.00%	1.41%	0.00	0.02%
8/20/2018	\$11.22	0.18%	0.33%	-0.10%	0.26%	-0.08%	1.41%	-0.06	4.61%
8/21/2018	\$11.54	2.85%	0.31%	0.37%	0.74%	2.11%	1.41%	1.50	86.52%
8/22/2018	\$11.61	0.61%	0.20%	-0.31%	-0.17%	0.78%	1.41%	0.55	41.75%
8/23/2018	\$11.30	-2.67%	-0.31%	-0.25%	-0.91%	-1.76%	1.41%	-1.25	78.58%
8/24/2018	\$11.39	0.80%	0.58%	-0.63%	0.07%	0.72%	1.42%	0.51	38.95%
8/27/2018	\$11.73	2.99%	0.85%	0.59%	1.87%	1.12%	1.42%	0.79	56.74%
8/28/2018	\$11.55	-1.54%	0.12%	-0.56%	-0.58%	-0.96%	1.42%	-0.67	49.90%
8/29/2018	\$11.66	0.95%	0.38%	-0.53%	-0.13%	1.09%	1.42%	0.77	55.54%
8/30/2018	\$11.42	-2.06%	-0.42%	-0.44%	-1.30%	-0.76%	1.42%	-0.53	40.56%
8/31/2018	\$11.26	-1.40%	-0.28%	-0.21%	-0.82%	-0.58%	1.42%	-0.41	31.81%
9/4/2018	\$11.42	1.42%	-0.58%	1.28%	0.35%	1.07%	1.42%	0.76	54.92%
9/5/2018	\$11.47	0.44%	-0.47%	0.47%	-0.35%	0.79%	1.42%	0.55	42.01%
9/6/2018	\$11.38	-0.78%	-0.41%	-0.18%	-0.97%	0.19%	1.42%	0.13	10.43%
9/7/2018	\$11.13	-2.20%	-0.30%	-0.07%	-0.68%	-1.52%	1.42%	-1.07	71.52%
9/10/2018	\$11.11	-0.18%	0.24%	-0.40%	-0.22%	0.03%	1.42%	0.02	1.95%
9/11/2018	\$11.24	1.17%	0.23%	-0.19%	0.02%	1.15%	1.42%	0.81	58.17%
9/12/2018	\$11.24	0.00%	0.23%	-0.86%	-0.75%	0.75%	1.42%	0.53	40.27%
9/13/2018	\$11.36	1.07%	0.46%	-0.32%	0.22%	0.85%	1.42%	0.60	44.92%
9/14/2018	\$11.40	0.35%	0.18%	-0.01%	0.13%	0.22%	1.41%	0.16	12.55%
9/17/2018	\$11.51	0.96%	-0.28%	0.59%	0.09%	0.87%	1.41%	0.62	46.19%
9/18/2018	\$11.58	0.61%	0.54%	-0.56%	0.09%	0.51%	1.41%	0.36	28.35%
9/19/2018	\$11.95	3.20%	0.25%	2.26%	2.83%	0.36%	1.41%	0.26	20.13%
9/20/2018	\$12.25	2.51%	0.82%	0.36%	1.59%	0.92%	1.41%	0.65	48.31%
9/21/2018	\$12.34	0.73%	0.20%	-0.71%	-0.61%	1.34%	1.41%	0.95	65.73%
9/24/2018	\$12.24	-0.81%	-0.32%	-0.34%	-1.01%	0.20%	1.41%	0.14	11.30%
9/25/2018	\$12.15	-0.73%	0.05%	-0.21%	-0.27%	-0.47%	1.41%	-0.33	25.93%
9/26/2018	\$11.90	-2.06%	-0.22%	-0.71%	-1.25%	-0.81%	1.40%	-0.57	43.40%
9/27/2018	\$11.81	-0.76%	-0.03%	-0.32%	-0.52%	-0.24%	1.40%	-0.17	13.35%
9/28/2018	\$11.36	-3.81%	-0.21%	-1.65%	-2.29%	-1.52%	1.40%	-1.08	72.06%
10/1/2018	\$11.25	-0.97%	0.19%	0.01%	0.17%	-1.13%	1.40%	-0.81	58.23%
10/2/2018	\$11.13	-1.07%	-0.21%	0.03%	-0.46%	-0.61%	1.40%	-0.44	33.70%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
10/3/2018	\$11.32	1.71%	0.00%	1.00%	0.97%	0.73%	1.39%	0.53	40.10%
10/4/2018	\$11.20	-1.06%	-0.83%	1.79%	0.55%	-1.61%	1.39%	-1.15	75.04%
10/5/2018	\$11.12	-0.71%	-0.65%	0.10%	-1.06%	0.34%	1.39%	0.25	19.44%
10/8/2018	\$11.05	-0.63%	-0.36%	0.46%	-0.23%	-0.40%	1.40%	-0.29	22.73%
10/9/2018	\$11.03	-0.18%	-0.24%	-0.41%	-0.97%	0.79%	1.39%	0.57	42.93%
10/10/2018	\$10.92	-1.00%	-2.31%	0.92%	-2.79%	1.80%	1.39%	1.29	80.18%
10/11/2018	\$10.83	-0.82%	-2.11%	0.13%	-3.18%	2.36%	1.40%	1.69	90.78%
10/12/2018	\$10.84	0.09%	0.90%	-0.94%	0.16%	-0.07%	1.40%	-0.05	4.02%
10/15/2018	\$11.03	1.75%	-0.40%	-0.45%	-1.20%	2.95%	1.41%	2.10	96.31%
10/16/2018	\$11.16	1.18%	1.76%	-0.87%	1.48%	-0.30%	1.42%	-0.21	16.80%
10/17/2018	\$11.26	0.90%	-0.08%	0.65%	0.49%	0.41%	1.42%	0.29	22.80%
10/18/2018	\$10.97	-2.58%	-1.20%	-0.72%	-2.59%	0.02%	1.42%	0.01	0.94%
10/19/2018	\$10.92	-0.46%	-0.10%	0.34%	0.11%	-0.57%	1.42%	-0.40	31.18%
10/22/2018	\$10.72	-1.83%	-0.43%	-1.39%	-2.27%	0.44%	1.42%	0.31	24.08%
10/23/2018	\$10.70	-0.19%	-0.95%	-0.03%	-1.52%	1.33%	1.42%	0.94	65.12%
10/24/2018	\$10.00	-6.54%	-2.23%	0.23%	-3.00%	-3.54%	1.41%	-2.50	98.71%
10/25/2018	\$10.00	0.00%	0.89%	0.39%	1.55%	-1.55%	1.41%	-1.10	72.79%
10/26/2018	\$9.67	-3.30%	-1.22%	0.50%	-1.29%	-2.01%	1.41%	-1.42	84.30%
10/29/2018	\$9.64	-0.31%	-0.31%	1.64%	1.17%	-1.48%	1.41%	-1.05	70.45%
10/30/2018	\$9.74	1.04%	1.09%	-0.33%	1.09%	-0.05%	1.41%	-0.04	3.08%
10/31/2018	\$9.77	0.31%	1.24%	0.16%	1.82%	-1.51%	1.41%	-1.07	71.43%
11/1/2018	\$10.25	4.91%	0.94%	-0.32%	0.86%	4.05%	1.41%	2.86	99.55%
11/2/2018	\$10.52	2.63%	-0.21%	0.51%	0.12%	2.52%	1.43%	1.76	92.00%
11/5/2018	\$10.46	-0.57%	0.20%	0.18%	0.35%	-0.92%	1.44%	-0.64	47.82%
11/6/2018	\$10.44	-0.19%	0.49%	-0.41%	0.16%	-0.35%	1.43%	-0.24	19.29%
11/7/2018	\$10.61	1.63%	1.65%	-0.38%	1.85%	-0.22%	1.43%	-0.15	12.09%
11/8/2018	\$10.34	-2.54%	-0.09%	0.20%	-0.04%	-2.50%	1.43%	-1.75	91.78%
11/9/2018	\$10.12	-2.13%	-0.93%	-0.25%	-1.72%	-0.41%	1.43%	-0.28	22.35%
11/12/2018	\$9.73	-3.85%	-1.67%	-0.24%	-2.82%	-1.03%	1.41%	-0.73	53.35%
11/13/2018	\$9.86	1.34%	-0.10%	1.06%	0.80%	0.53%	1.41%	0.38	29.54%
11/14/2018	\$9.87	0.10%	-0.56%	-0.74%	-1.77%	1.87%	1.41%	1.33	81.42%
11/15/2018	\$9.90	0.30%	0.55%	0.98%	1.67%	-1.37%	1.41%	-0.97	66.67%
11/16/2018	\$9.81	-0.91%	0.27%	-0.56%	-0.36%	-0.55%	1.41%	-0.39	30.32%
11/19/2018	\$9.78	-0.31%	-1.09%	1.42%	-0.28%	-0.02%	1.40%	-0.02	1.39%
11/20/2018	\$9.23	-5.62%	-1.63%	-0.25%	-2.79%	-2.83%	1.40%	-2.03	95.63%
11/21/2018	\$9.44	2.28%	0.40%	-0.18%	0.20%	2.08%	1.41%	1.48	85.89%
11/23/2018	\$9.25	-2.01%	-0.49%	-0.39%	-1.32%	-0.69%	1.41%	-0.49	37.37%
11/26/2018	\$9.73	5.19%	1.22%	1.11%	2.80%	2.39%	1.41%	1.69	90.77%
11/27/2018	\$9.84	1.13%	0.04%	-0.07%	-0.19%	1.32%	1.42%	0.93	64.74%
11/28/2018	\$9.89	0.51%	1.49%	-0.25%	1.83%	-1.32%	1.42%	-0.93	64.83%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
11/29/2018	\$9.42	-4.75%	0.25%	-1.34%	-1.28%	-3.48%	1.41%	-2.46	98.55%
11/30/2018	\$9.16	-2.76%	0.32%	-0.14%	0.11%	-2.87%	1.43%	-2.01	95.47%
12/3/2018	\$9.39	2.51%	1.24%	-0.48%	1.10%	1.41%	1.44%	0.98	67.30%
12/4/2018	\$9.06	-3.51%	-2.41%	-1.27%	-5.28%	1.77%	1.44%	1.23	77.91%
12/6/2018	\$8.90	-1.77%	-1.29%	-0.75%	-2.99%	1.23%	1.45%	0.85	60.34%
12/7/2018	\$8.73	-1.91%	-1.29%	-0.44%	-2.61%	0.70%	1.45%	0.49	37.28%
12/10/2018	\$8.38	-4.01%	-0.63%	-1.09%	-2.37%	-1.64%	1.44%	-1.14	74.33%
12/11/2018	\$8.33	-0.60%	0.09%	-1.04%	-1.27%	0.67%	1.44%	0.47	35.78%
12/12/2018	\$9.03	8.40%	1.09%	-0.12%	1.27%	7.13%	1.45%	4.94	100.00%
12/13/2018	\$8.87	-1.77%	-0.07%	-0.06%	-0.38%	-1.39%	1.51%	-0.92	63.99%
12/14/2018	\$8.80	-0.79%	-1.61%	1.27%	-1.29%	0.50%	1.52%	0.33	25.70%
12/17/2018	\$8.60	-2.27%	-1.45%	0.84%	-1.48%	-0.79%	1.52%	-0.52	39.82%
12/18/2018	\$8.69	1.05%	-0.32%	0.32%	-0.33%	1.38%	1.52%	0.91	63.66%
12/19/2018	\$8.37	-3.68%	-0.81%	-0.23%	-1.68%	-2.00%	1.51%	-1.32	81.34%
12/20/2018	\$8.06	-3.70%	-1.58%	1.48%	-0.94%	-2.77%	1.52%	-1.83	93.08%
12/21/2018	\$7.87	-2.36%	-1.50%	-0.44%	-2.98%	0.63%	1.53%	0.41	31.83%
12/24/2018	\$7.91	0.51%	-1.74%	0.44%	-2.39%	2.90%	1.53%	1.90	94.13%
12/26/2018	\$8.16	3.16%	2.65%	0.70%	4.55%	-1.39%	1.53%	-0.90	63.30%
12/27/2018	\$7.81	-4.29%	0.63%	-0.36%	0.34%	-4.63%	1.54%	-3.02	99.72%
12/28/2018	\$8.05	3.07%	0.45%	-0.20%	0.22%	2.85%	1.56%	1.82	93.04%
12/31/2018	\$8.15	1.24%	0.70%	-0.25%	0.55%	0.70%	1.58%	0.44	34.05%
1/2/2019	\$8.20	0.61%	-0.15%	1.36%	1.11%	-0.49%	1.57%	-0.31	24.52%
1/3/2019	\$8.09	-1.34%	-1.49%	0.52%	-1.80%	0.46%	1.57%	0.29	22.86%
1/4/2019	\$8.52	5.32%	2.75%	0.55%	4.44%	0.87%	1.57%	0.56	42.12%
1/7/2019	\$8.70	2.11%	0.82%	-0.97%	0.03%	2.08%	1.53%	1.36	82.61%
1/8/2019	\$8.74	0.46%	0.84%	-1.04%	0.01%	0.45%	1.53%	0.29	23.16%
1/9/2019	\$8.56	-2.06%	0.79%	-0.45%	0.55%	-2.61%	1.53%	-1.71	91.10%
1/10/2019	\$8.61	0.58%	0.34%	-0.19%	0.14%	0.44%	1.53%	0.29	22.57%
1/11/2019	\$8.56	-0.58%	-0.03%	0.22%	0.02%	-0.60%	1.53%	-0.39	30.36%
1/14/2019	\$8.58	0.23%	-0.46%	1.77%	1.01%	-0.78%	1.54%	-0.50	38.57%
1/15/2019	\$8.63	0.58%	0.79%	-0.03%	0.98%	-0.40%	1.53%	-0.26	20.32%
1/16/2019	\$9.29	7.65%	0.15%	2.46%	2.63%	5.02%	1.53%	3.28	99.88%
1/17/2019	\$8.92	-3.98%	0.46%	-0.21%	0.33%	-4.31%	1.56%	-2.76	99.37%
1/18/2019	\$9.14	2.47%	1.27%	-0.27%	1.43%	1.04%	1.59%	0.65	48.60%
1/22/2019	\$8.85	-3.17%	-1.10%	-0.29%	-2.11%	-1.06%	1.59%	-0.67	49.54%
1/23/2019	\$9.05	2.26%	0.07%	-0.01%	-0.08%	2.34%	1.58%	1.48	85.97%
1/24/2019	\$8.86	-2.10%	0.16%	-0.02%	0.05%	-2.15%	1.59%	-1.35	82.26%
1/25/2019	\$9.24	4.29%	0.94%	0.33%	1.60%	2.69%	1.60%	1.69	90.69%
1/28/2019	\$9.27	0.33%	-0.63%	0.68%	-0.33%	0.66%	1.61%	0.41	31.71%
1/29/2019	\$9.23	-0.43%	0.02%	-0.18%	-0.32%	-0.11%	1.60%	-0.07	5.35%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
1/30/2019	\$9.29	0.65%	1.07%	-1.02%	0.30%	0.35%	1.60%	0.22	17.14%
1/31/2019	\$8.88	-4.41%	0.87%	-2.31%	-1.48%	-2.93%	1.60%	-1.84	93.26%
2/1/2019	\$8.85	-0.34%	0.05%	-0.40%	-0.56%	0.23%	1.61%	0.14	11.15%
2/4/2019	\$8.80	-0.57%	0.40%	0.09%	0.53%	-1.10%	1.61%	-0.68	50.34%
2/5/2019	\$8.90	1.14%	0.67%	-0.67%	0.00%	1.13%	1.61%	0.70	51.85%
2/6/2019	\$8.95	0.56%	-0.21%	0.18%	-0.26%	0.82%	1.61%	0.51	39.08%
2/7/2019	\$8.36	-6.59%	-0.99%	-0.37%	-2.07%	-4.52%	1.60%	-2.82	99.48%
2/8/2019	\$8.19	-2.03%	-0.32%	-0.29%	-1.01%	-1.02%	1.62%	-0.63	47.08%
2/11/2019	\$8.32	1.59%	0.05%	-0.15%	-0.30%	1.88%	1.63%	1.16	75.24%
2/12/2019	\$8.54	2.64%	1.16%	0.01%	1.59%	1.06%	1.63%	0.65	48.34%
2/13/2019	\$8.54	0.00%	0.37%	-0.05%	0.32%	-0.32%	1.63%	-0.20	15.45%
2/14/2019	\$8.34	-2.34%	-0.25%	-0.56%	-1.25%	-1.09%	1.62%	-0.67	49.64%
2/15/2019	\$8.80	5.51%	0.93%	1.48%	3.04%	2.47%	1.63%	1.52	87.06%
2/19/2019	\$8.61	-2.16%	0.45%	-0.84%	-0.51%	-1.64%	1.63%	-1.01	68.53%
2/20/2019	\$8.74	1.51%	0.37%	0.21%	0.66%	0.85%	1.63%	0.52	39.65%
2/21/2019	\$8.66	-0.91%	-0.30%	-0.19%	-0.89%	-0.03%	1.62%	-0.02	1.33%
2/22/2019	\$8.65	-0.12%	0.46%	-0.88%	-0.58%	0.47%	1.62%	0.29	22.61%
2/25/2019	\$8.77	1.39%	0.23%	0.57%	0.90%	0.48%	1.62%	0.30	23.51%
2/26/2019	\$8.92	1.71%	-0.01%	0.05%	-0.12%	1.83%	1.62%	1.14	74.25%
2/27/2019	\$9.11	2.13%	0.02%	0.73%	0.78%	1.35%	1.62%	0.83	59.36%
2/28/2019	\$9.24	1.43%	-0.30%	-0.14%	-0.82%	2.24%	1.62%	1.38	83.23%
3/1/2019	\$9.29	0.54%	0.50%	-0.34%	0.21%	0.33%	1.63%	0.20	16.15%
3/4/2019	\$9.20	-0.97%	-0.28%	-0.07%	-0.70%	-0.27%	1.63%	-0.17	13.28%
3/5/2019	\$9.16	-0.44%	-0.14%	0.08%	-0.28%	-0.15%	1.62%	-0.09	7.41%
3/6/2019	\$9.17	0.11%	-0.42%	0.05%	-0.77%	0.87%	1.62%	0.54	40.91%
3/7/2019	\$8.66	-5.56%	-0.83%	-0.18%	-1.71%	-3.86%	1.62%	-2.37	98.16%
3/8/2019	\$8.64	-0.23%	-0.50%	0.61%	-0.20%	-0.03%	1.64%	-0.02	1.32%
3/11/2019	\$9.12	5.56%	1.15%	-0.26%	1.37%	4.18%	1.63%	2.56	98.89%
3/12/2019	\$8.86	-2.85%	0.42%	-0.43%	0.00%	-2.85%	1.65%	-1.73	91.46%
3/13/2019	\$9.06	2.26%	0.59%	0.19%	1.06%	1.20%	1.66%	0.72	52.90%
3/14/2019	\$8.91	-1.66%	0.03%	0.56%	0.62%	-2.28%	1.66%	-1.37	82.78%
3/15/2019	\$8.88	-0.34%	0.59%	-0.03%	0.78%	-1.12%	1.67%	-0.67	49.60%
3/18/2019	\$9.26	4.28%	0.44%	0.67%	1.40%	2.88%	1.67%	1.72	91.35%
3/19/2019	\$9.05	-2.27%	0.12%	-0.47%	-0.56%	-1.71%	1.68%	-1.02	69.03%
3/20/2019	\$8.78	-2.98%	-0.40%	-1.64%	-2.94%	-0.04%	1.68%	-0.03	2.02%
3/21/2019	\$8.43	-3.99%	0.75%	-2.19%	-1.75%	-2.23%	1.68%	-1.33	81.43%
3/22/2019	\$8.21	-2.61%	-1.56%	-1.45%	-4.64%	2.03%	1.67%	1.22	77.67%
3/25/2019	\$8.17	-0.49%	-0.37%	-0.11%	-0.91%	0.42%	1.67%	0.25	19.92%
3/26/2019	\$8.28	1.35%	0.75%	0.09%	1.15%	0.19%	1.67%	0.12	9.17%
3/27/2019	\$8.46	2.17%	-0.41%	0.42%	-0.27%	2.44%	1.67%	1.47	85.63%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
3/28/2019	\$8.19	-3.19%	0.06%	0.67%	0.84%	-4.03%	1.67%	-2.41	98.32%
3/29/2019	\$8.12	-0.86%	0.60%	-0.10%	0.67%	-1.53%	1.69%	-0.90	63.18%
4/1/2019	\$8.55	5.30%	1.14%	1.97%	4.28%	1.02%	1.69%	0.60	45.25%
4/2/2019	\$8.50	-0.58%	0.00%	0.69%	0.77%	-1.35%	1.69%	-0.80	57.44%
4/3/2019	\$8.59	1.06%	0.53%	-0.03%	0.67%	0.39%	1.69%	0.23	18.14%
4/4/2019	\$8.50	-1.05%	-0.01%	0.75%	0.82%	-1.87%	1.69%	-1.10	72.89%
4/5/2019	\$8.35	-1.76%	0.33%	-0.60%	-0.42%	-1.35%	1.70%	-0.79	57.10%
4/8/2019	\$8.32	-0.36%	0.14%	0.16%	0.27%	-0.63%	1.70%	-0.37	28.81%
4/9/2019	\$8.24	-0.96%	-0.45%	-0.03%	-0.94%	-0.02%	1.70%	-0.01	0.86%
4/10/2019	\$8.21	-0.36%	0.22%	0.05%	0.24%	-0.61%	1.70%	-0.36	28.01%
4/11/2019	\$8.39	2.19%	-0.02%	0.68%	0.70%	1.49%	1.69%	0.88	61.98%
4/12/2019	\$8.61	2.62%	0.55%	2.66%	4.31%	-1.68%	1.69%	-1.00	68.01%
4/15/2019	\$8.64	0.35%	0.08%	-0.63%	-0.89%	1.24%	1.69%	0.74	53.71%
4/16/2019	\$8.87	2.66%	0.09%	1.11%	1.48%	1.18%	1.69%	0.70	51.65%
4/17/2019	\$8.93	0.68%	-0.10%	1.73%	2.03%	-1.35%	1.69%	-0.80	57.54%
4/18/2019	\$8.78	-1.68%	-0.03%	-0.50%	-0.87%	-0.81%	1.69%	-0.48	36.66%
4/22/2019	\$8.75	-0.34%	0.06%	-0.16%	-0.28%	-0.06%	1.69%	-0.04	2.99%
4/23/2019	\$8.54	-2.40%	0.59%	-0.91%	-0.46%	-1.94%	1.68%	-1.15	74.99%
4/24/2019	\$8.50	-0.47%	-0.26%	-0.16%	-0.82%	0.35%	1.69%	0.21	16.29%
4/25/2019	\$8.35	-1.76%	-0.16%	0.19%	-0.20%	-1.57%	1.66%	-0.94	65.31%
4/26/2019	\$8.19	-1.92%	0.39%	0.33%	0.92%	-2.83%	1.67%	-1.70	90.96%
4/29/2019	\$8.32	1.59%	0.08%	1.42%	1.93%	-0.34%	1.66%	-0.20	16.21%
4/30/2019	\$8.28	-0.48%	0.14%	-0.35%	-0.43%	-0.05%	1.66%	-0.03	2.41%
5/1/2019	\$8.15	-1.57%	-0.40%	-0.39%	-1.38%	-0.19%	1.66%	-0.12	9.29%
5/2/2019	\$8.22	0.86%	-0.41%	1.10%	0.67%	0.19%	1.66%	0.12	9.26%
5/3/2019	\$8.22	0.00%	0.77%	0.08%	1.21%	-1.21%	1.65%	-0.73	53.55%
5/6/2019	\$8.11	-1.34%	-0.51%	-0.36%	-1.53%	0.19%	1.66%	0.12	9.19%
5/7/2019	\$7.82	-3.58%	-1.44%	-0.29%	-2.98%	-0.60%	1.65%	-0.36	28.26%
5/8/2019	\$7.87	0.64%	-0.17%	-0.10%	-0.61%	1.25%	1.65%	0.76	54.95%
5/9/2019	\$7.78	-1.14%	-0.59%	0.31%	-0.73%	-0.42%	1.65%	-0.25	20.02%
5/10/2019	\$7.87	1.16%	0.33%	-0.35%	-0.12%	1.28%	1.65%	0.78	56.19%
5/13/2019	\$7.64	-2.92%	-1.87%	-1.15%	-4.94%	2.01%	1.65%	1.22	77.62%
5/14/2019	\$7.68	0.52%	0.59%	0.24%	1.15%	-0.63%	1.65%	-0.38	29.77%
5/15/2019	\$7.67	-0.13%	0.55%	-0.99%	-0.63%	0.50%	1.65%	0.30	23.63%
5/16/2019	\$7.66	-0.13%	0.74%	0.23%	1.39%	-1.52%	1.64%	-0.92	64.33%
5/17/2019	\$7.58	-1.05%	-0.45%	-0.35%	-1.39%	0.34%	1.64%	0.21	16.43%
5/20/2019	\$7.43	-1.98%	-0.56%	0.67%	-0.13%	-1.84%	1.65%	-1.12	73.64%
5/21/2019	\$7.52	1.21%	0.62%	0.13%	1.05%	0.16%	1.65%	0.10	7.73%
5/22/2019	\$7.34	-2.39%	-0.28%	-0.61%	-1.46%	-0.93%	1.65%	-0.56	42.71%
5/23/2019	\$7.23	-1.50%	-1.15%	-0.11%	-2.24%	0.74%	1.65%	0.45	34.75%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
5/24/2019	\$7.18	1.01%	0.36%	0.65%	1.35%	-0.34%	1.65%	-0.20	16.19%
5/28/2019	\$7.02	-2.23%	-0.50%	-0.48%	-1.63%	-0.60%	1.63%	-0.37	28.60%
5/29/2019	\$6.92	-1.43%	-0.95%	1.00%	-0.34%	-1.09%	1.63%	-0.67	49.49%
5/30/2019	\$6.91	-0.14%	0.08%	-1.17%	-1.61%	1.47%	1.63%	0.90	63.16%
5/31/2019	\$6.77	-2.03%	-0.98%	-0.25%	-2.05%	0.02%	1.63%	0.01	1.17%
6/3/2019	\$6.73	-0.59%	-0.06%	0.48%	0.44%	-1.03%	1.62%	-0.63	47.19%
6/4/2019	\$7.07	5.05%	1.59%	1.52%	4.51%	0.55%	1.62%	0.34	26.34%
6/5/2019	\$6.92	-2.12%	0.87%	-1.10%	-0.19%	-1.94%	1.62%	-1.20	76.71%
6/6/2019	\$6.75	-2.46%	0.40%	-0.26%	0.16%	-2.61%	1.62%	-1.61	89.13%
6/7/2019	\$6.76	0.15%	1.08%	-2.01%	-1.20%	1.34%	1.63%	0.82	58.87%
6/10/2019	\$6.89	1.92%	0.41%	0.80%	1.59%	0.33%	1.63%	0.20	16.05%
6/11/2019	\$6.98	1.31%	0.20%	0.30%	0.59%	0.72%	1.63%	0.44	34.02%
6/12/2019	\$6.88	-1.43%	-0.25%	-0.99%	-1.88%	0.45%	1.63%	0.28	21.76%
6/13/2019	\$6.87	-0.15%	0.12%	-0.12%	-0.11%	-0.03%	1.63%	-0.02	1.52%
6/14/2019	\$6.79	-1.17%	-0.28%	0.38%	-0.07%	-1.10%	1.63%	-0.68	49.98%
6/17/2019	\$6.82	0.44%	0.00%	-0.62%	-1.00%	1.44%	1.63%	0.88	62.20%
6/18/2019	\$7.08	3.81%	0.94%	0.72%	2.34%	1.47%	1.63%	0.90	63.22%
6/19/2019	\$7.17	1.27%	0.50%	-0.90%	-0.56%	1.83%	1.63%	1.12	73.75%
6/20/2019	\$7.17	0.00%	1.01%	-0.89%	0.29%	-0.29%	1.63%	-0.17	13.87%
6/21/2019	\$7.18	0.14%	-0.24%	-0.44%	-1.11%	1.25%	1.63%	0.77	55.56%
6/24/2019	\$7.10	-1.11%	0.00%	-0.51%	-0.82%	-0.29%	1.63%	-0.18	14.28%
6/25/2019	\$7.12	0.28%	-0.66%	0.06%	-1.13%	1.41%	1.63%	0.86	61.16%
6/26/2019	\$7.37	3.51%	-0.25%	1.06%	0.92%	2.59%	1.63%	1.59	88.71%
6/27/2019	\$7.54	2.31%	0.37%	0.48%	1.15%	1.16%	1.64%	0.71	51.92%
6/28/2019	\$7.63	1.19%	0.55%	1.41%	2.72%	-1.53%	1.64%	-0.93	64.87%
7/1/2019	\$7.64	0.13%	0.64%	0.38%	1.45%	-1.32%	1.63%	-0.81	57.95%
7/2/2019	\$7.59	-0.65%	0.29%	-0.57%	-0.43%	-0.23%	1.63%	-0.14	11.01%
7/3/2019	\$7.81	2.90%	0.67%	-0.65%	0.07%	2.83%	1.63%	1.73	91.59%
7/5/2019	\$8.03	2.82%	-0.35%	1.11%	0.86%	1.95%	1.64%	1.19	76.52%
7/8/2019	\$7.54	-6.10%	-0.50%	0.03%	-0.85%	-5.25%	1.63%	-3.23	99.86%
7/9/2019	\$7.28	-3.45%	-0.04%	0.29%	0.21%	-3.66%	1.66%	-2.21	97.18%
7/10/2019	\$7.40	1.65%	0.34%	-0.78%	-0.70%	2.35%	1.67%	1.41	84.05%
7/11/2019	\$7.48	1.08%	0.19%	0.64%	1.08%	0.00%	1.67%	0.00	0.16%
7/12/2019	\$7.67	2.54%	0.33%	0.08%	0.51%	2.03%	1.67%	1.21	77.36%
7/15/2019	\$7.77	1.30%	0.08%	-0.67%	-0.95%	2.25%	1.68%	1.34	81.89%
7/16/2019	\$7.97	2.57%	-0.28%	0.39%	-0.02%	2.59%	1.68%	1.54	87.61%
7/17/2019	\$7.88	-1.13%	-0.46%	0.09%	-0.75%	-0.38%	1.67%	-0.23	17.97%
7/18/2019	\$7.93	0.63%	0.02%	0.77%	0.93%	-0.30%	1.66%	-0.18	14.16%
7/19/2019	\$7.72	-2.65%	-0.17%	-0.58%	-1.17%	-1.48%	1.66%	-0.89	62.43%
7/22/2019	\$7.80	1.04%	0.14%	0.38%	0.59%	0.44%	1.67%	0.27	21.01%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
7/23/2019	\$7.95	1.92%	0.54%	1.03%	2.12%	-0.20%	1.66%	-0.12	9.47%
7/24/2019	\$7.92	-0.38%	0.37%	-0.10%	0.33%	-0.71%	1.66%	-0.43	33.01%
7/25/2019	\$7.90	-0.25%	-0.49%	-0.61%	-1.74%	1.49%	1.66%	0.90	62.89%
7/26/2019	\$7.93	0.38%	0.40%	0.21%	0.79%	-0.41%	1.66%	-0.25	19.58%
7/29/2019	\$7.83	-1.26%	-0.14%	-0.47%	-1.01%	-0.25%	1.67%	-0.15	12.04%
7/30/2019	\$7.75	-1.02%	-0.41%	0.43%	-0.23%	-0.79%	1.66%	-0.47	36.40%
7/31/2019	\$7.81	0.77%	-0.72%	0.64%	-0.49%	1.27%	1.66%	0.76	55.47%
8/1/2019	\$7.61	-2.56%	-0.66%	-1.84%	-3.69%	1.13%	1.65%	0.68	50.46%
8/2/2019	\$7.89	3.68%	-1.07%	1.10%	-0.43%	4.11%	1.65%	2.49	98.66%
8/5/2019	\$7.65	-3.04%	-2.45%	-0.46%	-4.61%	1.56%	1.66%	0.94	65.21%
8/6/2019	\$7.63	-0.26%	0.57%	0.45%	1.37%	-1.63%	1.66%	-0.98	67.35%
8/7/2019	\$7.47	-2.10%	0.23%	-1.79%	-2.19%	0.10%	1.67%	0.06	4.60%
8/8/2019	\$7.66	2.54%	1.55%	-0.45%	1.66%	0.88%	1.66%	0.53	40.24%
8/9/2019	\$7.53	-1.70%	-0.54%	0.21%	-0.69%	-1.00%	1.66%	-0.60	45.26%
8/12/2019	\$6.95	-7.70%	-0.83%	-1.26%	-3.10%	-4.60%	1.66%	-2.77	99.40%
8/13/2019	\$7.21	3.74%	0.80%	0.01%	1.12%	2.62%	1.68%	1.56	87.94%
8/14/2019	\$6.69	-7.21%	-2.26%	-1.38%	-5.60%	-1.62%	1.69%	-0.96	66.00%
8/15/2019	\$6.44	-3.74%	-0.16%	0.23%	-0.09%	-3.65%	1.69%	-2.15	96.78%
8/16/2019	\$6.94	7.76%	1.23%	1.10%	3.38%	4.38%	1.71%	2.56	98.91%
8/19/2019	\$7.05	1.59%	1.11%	-0.40%	1.17%	0.42%	1.73%	0.24	19.08%
8/20/2019	\$6.97	-1.14%	-0.57%	-0.62%	-1.96%	0.83%	1.73%	0.48	36.77%
8/21/2019	\$7.01	0.57%	0.75%	-0.53%	0.39%	0.18%	1.73%	0.11	8.46%
8/22/2019	\$7.17	2.28%	-0.18%	1.15%	1.19%	1.09%	1.73%	0.63	47.13%
8/23/2019	\$6.97	-2.79%	-1.74%	-0.24%	-3.36%	0.57%	1.73%	0.33	25.83%
8/26/2019	\$7.07	1.44%	0.51%	0.35%	1.22%	0.21%	1.73%	0.12	9.83%
8/27/2019	\$7.13	0.85%	-0.02%	-0.98%	-1.53%	2.38%	1.72%	1.38	83.12%
8/28/2019	\$7.16	0.42%	0.34%	0.43%	1.03%	-0.61%	1.73%	-0.35	27.63%
8/29/2019	\$7.22	0.84%	1.00%	0.67%	2.48%	-1.64%	1.73%	-0.95	65.68%
8/30/2019	\$7.25	0.41%	0.26%	0.18%	0.55%	-0.14%	1.73%	-0.08	6.32%
9/3/2019	\$7.30	0.69%	-0.54%	-0.38%	-1.53%	2.22%	1.73%	1.28	79.75%
9/4/2019	\$7.48	2.47%	1.08%	0.19%	1.93%	0.53%	1.74%	0.31	24.17%
9/5/2019	\$7.82	4.55%	1.14%	0.95%	3.09%	1.46%	1.74%	0.84	59.74%
9/6/2019	\$7.85	0.38%	0.21%	-0.48%	-0.41%	0.80%	1.74%	0.46	35.38%
9/9/2019	\$8.13	3.57%	-0.02%	2.83%	3.78%	-0.22%	1.74%	-0.12	9.93%
9/10/2019	\$8.30	2.09%	0.05%	1.79%	2.46%	-0.37%	1.74%	-0.21	16.98%
9/11/2019	\$8.29	-0.12%	0.69%	-0.49%	0.41%	-0.53%	1.74%	-0.31	24.05%
9/12/2019	\$8.32	0.36%	0.34%	0.14%	0.67%	-0.31%	1.73%	-0.18	14.13%
9/13/2019	\$8.45	1.56%	0.18%	1.52%	2.33%	-0.77%	1.73%	-0.44	34.27%
9/16/2019	\$8.23	-2.60%	-0.45%	-0.41%	-1.38%	-1.22%	1.74%	-0.70	51.68%
9/17/2019	\$8.19	-0.49%	0.27%	-0.92%	-0.91%	0.42%	1.74%	0.24	19.18%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
9/18/2019	\$8.06	-1.59%	-0.03%	0.47%	0.50%	-2.09%	1.74%	-1.20	77.01%
9/19/2019	\$8.07	0.12%	0.17%	-0.34%	-0.29%	0.41%	1.74%	0.24	18.65%
9/20/2019	\$7.99	-0.99%	-0.32%	0.08%	-0.54%	-0.45%	1.74%	-0.26	20.53%
9/23/2019	\$7.79	-2.50%	-0.17%	-0.10%	-0.54%	-1.96%	1.74%	-1.13	73.95%
9/24/2019	\$7.58	-2.70%	-0.53%	-0.84%	-2.18%	-0.52%	1.74%	-0.30	23.49%
9/25/2019	\$7.58	0.00%	0.11%	0.53%	0.80%	-0.80%	1.74%	-0.46	35.33%
9/26/2019	\$7.42	-2.11%	-0.05%	-0.27%	-0.58%	-1.53%	1.74%	-0.88	61.96%
9/27/2019	\$7.56	1.89%	-0.36%	0.99%	0.62%	1.26%	1.74%	0.72	52.98%
9/30/2019	\$7.50	-0.79%	0.21%	-0.37%	-0.27%	-0.52%	1.75%	-0.30	23.53%
10/1/2019	\$7.25	-3.33%	-0.99%	-0.56%	-2.51%	-0.82%	1.75%	-0.47	36.16%
10/2/2019	\$7.19	-0.83%	-1.71%	-0.15%	-3.18%	2.35%	1.74%	1.35	82.04%
10/3/2019	\$7.15	-0.56%	0.47%	-0.55%	-0.09%	-0.46%	1.75%	-0.26	20.85%
10/4/2019	\$7.19	0.56%	1.05%	0.25%	1.96%	-1.40%	1.75%	-0.80	57.65%
10/7/2019	\$7.09	-1.39%	-0.09%	-0.09%	-0.40%	-1.00%	1.75%	-0.57	42.97%
10/8/2019	\$6.92	-2.40%	-1.29%	-0.30%	-2.65%	0.25%	1.75%	0.14	11.36%
10/9/2019	\$6.94	0.29%	0.63%	0.02%	0.95%	-0.66%	1.75%	-0.38	29.44%
10/10/2019	\$7.13	2.74%	0.59%	1.10%	2.38%	0.36%	1.75%	0.21	16.28%
10/11/2019	\$7.46	4.63%	1.36%	0.75%	3.20%	1.42%	1.75%	0.82	58.46%
10/14/2019	\$7.55	1.21%	-0.19%	0.53%	0.29%	0.92%	1.74%	0.53	40.02%
10/15/2019	\$7.78	3.05%	0.98%	1.04%	3.05%	0.00%	1.74%	0.00	0.11%
10/16/2019	\$7.84	0.77%	-0.06%	0.11%	-0.07%	0.84%	1.73%	0.49	37.31%
10/17/2019	\$7.90	0.76%	0.30%	0.00%	0.41%	0.35%	1.73%	0.20	16.08%
10/18/2019	\$7.92	0.25%	-0.30%	0.66%	0.27%	-0.02%	1.73%	-0.01	0.79%
10/21/2019	\$8.08	2.02%	0.64%	1.26%	2.80%	-0.78%	1.73%	-0.45	34.87%
10/22/2019	\$7.91	-2.10%	-0.23%	0.66%	0.40%	-2.51%	1.73%	-1.45	85.15%
10/23/2019	\$7.99	1.01%	0.18%	0.35%	0.70%	0.31%	1.74%	0.18	14.24%
10/24/2019	\$7.90	-1.13%	0.33%	-0.61%	-0.37%	-0.75%	1.73%	-0.43	33.58%
10/25/2019	\$7.97	0.89%	0.32%	0.40%	1.02%	-0.13%	1.73%	-0.08	6.15%
10/28/2019	\$8.05	1.00%	0.39%	-0.56%	-0.21%	1.21%	1.72%	0.70	51.64%
10/29/2019	\$7.98	-0.87%	0.05%	-0.01%	-0.03%	-0.83%	1.72%	-0.48	37.16%
10/30/2019	\$7.36	-7.77%	0.22%	-1.04%	-1.21%	-6.56%	1.72%	-3.81	99.98%
10/31/2019	\$7.25	-1.50%	-0.17%	-0.66%	-1.37%	-0.13%	1.72%	-0.08	6.00%
11/1/2019	\$7.39	1.93%	0.83%	0.85%	2.62%	-0.69%	1.72%	-0.40	31.33%
11/4/2019	\$7.66	3.65%	0.42%	0.95%	1.98%	1.68%	1.70%	0.99	67.60%
11/5/2019	\$7.61	-0.65%	-0.10%	0.45%	0.35%	-1.00%	1.70%	-0.59	44.42%
11/6/2019	\$7.65	0.53%	0.09%	-0.06%	-0.03%	0.56%	1.70%	0.33	25.72%
11/7/2019	\$7.76	1.44%	0.24%	0.69%	1.31%	0.13%	1.70%	0.07	5.88%
11/8/2019	\$7.63	-1.68%	0.09%	-0.16%	-0.17%	-1.51%	1.70%	-0.89	62.43%
11/11/2019	\$7.61	-0.26%	-0.11%	-0.20%	-0.59%	0.33%	1.70%	0.19	15.39%
11/12/2019	\$7.63	0.26%	0.16%	-0.64%	-0.72%	0.98%	1.69%	0.58	43.88%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
11/13/2019	\$7.28	-4.59%	-0.07%	-1.00%	-1.67%	-2.92%	1.69%	-1.72	91.37%
11/14/2019	\$7.21	-0.96%	-0.13%	0.16%	-0.14%	-0.82%	1.70%	-0.48	37.05%
11/15/2019	\$7.31	1.39%	0.77%	-0.34%	0.79%	0.60%	1.70%	0.35	27.42%
11/18/2019	\$7.35	0.55%	0.13%	0.25%	0.48%	0.07%	1.70%	0.04	3.33%
11/19/2019	\$7.35	0.00%	-0.04%	0.21%	0.11%	-0.11%	1.69%	-0.07	5.27%
11/20/2019	\$7.30	-0.68%	-0.43%	-0.23%	-1.28%	0.60%	1.69%	0.35	27.65%
11/21/2019	\$7.38	1.10%	-0.20%	0.50%	0.26%	0.84%	1.69%	0.50	38.15%
11/22/2019	\$7.36	-0.27%	0.16%	0.64%	1.11%	-1.38%	1.68%	-0.82	58.82%
11/25/2019	\$7.38	0.27%	0.74%	-0.25%	0.86%	-0.59%	1.68%	-0.35	27.30%
11/26/2019	\$7.29	-1.22%	0.18%	-0.44%	-0.44%	-0.78%	1.68%	-0.46	35.48%
11/27/2019	\$7.36	0.96%	0.34%	-0.15%	0.26%	0.70%	1.68%	0.42	32.20%
11/29/2019	\$7.21	-2.04%	-0.45%	0.07%	-0.84%	-1.20%	1.68%	-0.71	52.35%
12/2/2019	\$7.19	-0.28%	-0.69%	0.59%	-0.51%	0.24%	1.66%	0.14	11.26%
12/3/2019	\$7.06	-1.81%	-0.58%	-0.65%	-2.09%	0.28%	1.66%	0.17	13.43%
12/4/2019	\$7.17	1.56%	0.55%	0.53%	1.66%	-0.10%	1.66%	-0.06	4.75%
12/5/2019	\$7.18	0.14%	0.14%	0.21%	0.46%	-0.32%	1.65%	-0.20	15.53%
12/6/2019	\$7.22	0.56%	0.78%	0.36%	1.85%	-1.29%	1.64%	-0.78	56.57%
12/9/2019	\$7.21	-0.14%	-0.17%	-0.16%	-0.65%	0.51%	1.64%	0.31	24.49%
12/10/2019	\$7.19	-0.28%	-0.13%	0.12%	-0.17%	-0.10%	1.64%	-0.06	5.05%
12/11/2019	\$7.26	0.97%	0.23%	-0.21%	0.03%	0.94%	1.64%	0.58	43.49%
12/12/2019	\$7.57	4.27%	0.62%	1.84%	3.73%	0.54%	1.64%	0.33	25.87%
12/13/2019	\$7.48	-1.19%	0.45%	-0.75%	-0.40%	-0.79%	1.58%	-0.50	38.23%
12/16/2019	\$7.69	2.81%	0.76%	-0.14%	1.06%	1.75%	1.58%	1.10	72.92%
12/17/2019	\$7.81	1.56%	-0.04%	0.58%	0.68%	0.88%	1.58%	0.56	42.09%
12/18/2019	\$7.75	-0.77%	-0.14%	0.16%	-0.13%	-0.64%	1.58%	-0.41	31.44%
12/19/2019	\$7.89	1.81%	0.32%	-0.74%	-0.62%	2.43%	1.58%	1.53	87.39%
12/20/2019	\$7.77	-1.52%	0.39%	-0.71%	-0.42%	-1.10%	1.58%	-0.70	51.32%
12/23/2019	\$7.67	-1.29%	0.04%	0.10%	0.11%	-1.39%	1.58%	-0.88	62.25%
12/24/2019	\$7.62	-0.65%	0.05%	-0.05%	-0.10%	-0.55%	1.58%	-0.35	27.46%
12/26/2019	\$7.66	0.53%	0.36%	0.44%	1.18%	-0.66%	1.56%	-0.42	32.63%
12/27/2019	\$7.69	0.39%	0.20%	-0.31%	-0.21%	0.60%	1.56%	0.39	30.15%
12/30/2019	\$7.72	0.39%	-0.49%	0.39%	-0.50%	0.89%	1.52%	0.59	44.17%
12/31/2019	\$7.78	0.78%	0.22%	0.08%	0.44%	0.34%	1.52%	0.22	17.72%
1/2/2020	\$8.33	7.07%	0.74%	0.35%	1.83%	5.24%	1.52%	3.45	99.93%
1/3/2020	\$8.12	-2.52%	-0.54%	-0.99%	-2.65%	0.13%	1.56%	0.08	6.76%
1/6/2020	\$8.06	-0.74%	0.06%	-0.22%	-0.33%	-0.41%	1.56%	-0.26	20.77%
1/7/2020	\$8.25	2.36%	-0.09%	-0.72%	-1.37%	3.72%	1.55%	2.40	98.26%
1/8/2020	\$8.57	3.88%	0.19%	0.41%	0.89%	2.98%	1.57%	1.90	94.20%
1/9/2020	\$8.61	0.47%	0.55%	-0.44%	0.34%	0.13%	1.58%	0.08	6.53%
1/10/2020	\$8.52	-1.05%	-0.09%	-0.84%	-1.53%	0.48%	1.57%	0.31	24.01%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
1/13/2020	\$8.48	-0.47%	0.45%	0.32%	1.31%	-1.78%	1.57%	-1.13	74.14%
1/14/2020	\$8.58	1.18%	0.01%	0.70%	0.98%	0.20%	1.57%	0.13	10.18%
1/15/2020	\$8.41	-1.98%	0.15%	-1.51%	-2.08%	0.10%	1.57%	0.06	4.86%
1/16/2020	\$8.54	1.55%	0.59%	-0.58%	0.23%	1.31%	1.57%	0.84	59.66%
1/17/2020	\$8.42	-1.40%	0.39%	-0.34%	0.18%	-1.58%	1.55%	-1.02	69.07%
1/21/2020	\$8.27	-1.78%	-0.26%	-1.07%	-2.18%	0.40%	1.53%	0.26	20.71%
1/22/2020	\$8.40	1.57%	0.04%	0.18%	0.22%	1.35%	1.53%	0.88	62.20%
1/23/2020	\$8.56	1.90%	-0.17%	-0.13%	-0.63%	2.54%	1.53%	1.66	90.13%
1/24/2020	\$8.57	0.12%	-0.45%	-1.07%	-2.56%	2.68%	1.53%	1.75	91.81%
1/27/2020	\$8.54	-0.35%	-1.64%	0.64%	-2.47%	2.12%	1.53%	1.38	83.20%
1/28/2020	\$8.67	1.52%	0.70%	0.16%	1.51%	0.02%	1.53%	0.01	0.84%
1/29/2020	\$8.77	1.15%	0.04%	-0.39%	-0.55%	1.71%	1.53%	1.11	73.35%
1/30/2020	\$9.30	6.04%	-0.06%	1.23%	1.54%	4.50%	1.54%	2.93	99.63%
1/31/2020	\$9.15	-1.61%	-1.25%	-0.64%	-3.45%	1.84%	1.54%	1.20	76.70%
2/3/2020	\$8.96	-2.08%	0.39%	-0.16%	0.51%	-2.59%	1.54%	-1.68	90.66%
2/4/2020	\$8.99	0.34%	1.35%	-0.33%	2.21%	-1.88%	1.54%	-1.22	77.52%
2/5/2020	\$9.11	1.33%	0.91%	0.88%	2.94%	-1.61%	1.54%	-1.04	70.18%
2/6/2020	\$10.37	13.83%	0.48%	-0.49%	0.22%	13.62%	1.55%	8.81	100.00%
2/7/2020	\$10.41	0.39%	-0.49%	0.70%	-0.09%	0.48%	1.77%	0.27	21.14%
2/10/2020	\$10.30	-1.06%	0.35%	-0.24%	0.39%	-1.44%	1.75%	-0.82	58.97%
2/11/2020	\$10.50	1.94%	0.34%	0.22%	0.96%	0.98%	1.75%	0.56	42.31%
2/12/2020	\$10.85	3.33%	0.57%	-0.31%	0.71%	2.62%	1.75%	1.50	86.50%
2/13/2020	\$11.02	1.57%	-0.21%	-0.02%	-0.42%	1.99%	1.75%	1.13	74.16%
2/14/2020	\$11.04	0.18%	0.06%	-0.38%	-0.35%	0.53%	1.76%	0.30	23.87%
2/18/2020	\$10.71	-2.99%	-0.41%	-1.11%	-2.19%	-0.80%	1.76%	-0.45	34.97%
2/19/2020	\$10.67	-0.37%	0.40%	0.44%	1.36%	-1.74%	1.75%	-0.99	67.73%
2/20/2020	\$10.67	0.00%	-0.45%	0.80%	0.15%	-0.15%	1.75%	-0.09	6.79%
2/21/2020	\$10.24	-4.03%	-0.72%	-0.04%	-1.44%	-2.59%	1.75%	-1.48	85.99%
2/24/2020	\$9.64	-5.86%	-3.00%	0.41%	-5.39%	-0.47%	1.76%	-0.27	21.10%
2/25/2020	\$9.33	-3.22%	-2.63%	-0.39%	-5.68%	2.46%	1.76%	1.40	83.68%
2/26/2020	\$9.45	1.29%	-0.48%	0.35%	-0.45%	1.74%	1.77%	0.98	67.38%
2/27/2020	\$8.98	-4.97%	-3.60%	0.41%	-6.36%	1.39%	1.77%	0.78	56.65%
2/28/2020	\$8.72	-2.89%	-1.66%	-0.25%	-3.38%	0.48%	1.77%	0.27	21.58%
3/2/2020	\$8.59	-1.49%	3.33%	-1.42%	4.41%	-5.90%	1.77%	-3.34	99.90%
3/3/2020	\$8.14	-5.24%	-1.49%	-2.15%	-5.35%	0.12%	1.80%	0.06	5.11%
3/4/2020	\$8.20	0.74%	2.92%	-1.74%	2.65%	-1.92%	1.79%	-1.07	71.38%
3/5/2020	\$7.75	-5.49%	-2.26%	-1.58%	-5.84%	0.35%	1.80%	0.20	15.47%
3/6/2020	\$7.59	-2.06%	-1.96%	-0.97%	-4.59%	2.52%	1.80%	1.40	83.78%
3/9/2020	\$6.62	-12.78%	-7.17%	-2.66%	-15.14%	2.36%	1.79%	1.32	81.13%
3/10/2020	\$6.96	5.14%	2.84%	2.88%	8.41%	-3.27%	1.79%	-1.82	93.07%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
3/11/2020	\$6.51	-6.47%	-3.89%	1.37%	-4.81%	-1.66%	1.80%	-0.92	64.19%
3/12/2020	\$5.53	-15.05%	-9.92%	5.14%	-9.95%	-5.11%	1.78%	-2.87	99.55%
3/13/2020	\$5.97	7.96%	5.92%	6.36%	16.67%	-8.71%	1.79%	-4.87	100.00%
3/16/2020	\$5.48	-8.21%	-9.51%	-0.97%	-15.95%	7.75%	1.85%	4.18	100.00%
3/17/2020	\$5.79	5.66%	4.12%	-0.64%	5.37%	0.29%	1.90%	0.15	12.13%
3/18/2020	\$5.56	-3.97%	-5.12%	-0.10%	-7.45%	3.48%	1.90%	1.83	93.23%
3/19/2020	\$5.86	5.40%	0.73%	1.50%	2.29%	3.11%	1.90%	1.64	89.76%
3/20/2020	\$5.76	-1.71%	-2.57%	0.63%	-3.05%	1.34%	1.90%	0.71	51.93%
3/23/2020	\$5.84	1.39%	-2.96%	-1.11%	-5.03%	6.42%	1.90%	3.37	99.91%
3/24/2020	\$6.58	12.67%	8.77%	-1.04%	11.27%	1.40%	1.94%	0.72	52.88%
3/25/2020	\$6.88	4.56%	2.49%	-0.71%	2.94%	1.62%	1.94%	0.84	59.56%
3/26/2020	\$6.99	1.60%	5.02%	-1.06%	6.18%	-4.59%	1.94%	-2.36	98.10%
3/27/2020	\$6.47	-7.44%	-2.58%	-1.82%	-4.89%	-2.55%	1.96%	-1.30	80.43%
3/30/2020	\$6.51	0.62%	2.37%	-2.42%	1.24%	-0.62%	1.95%	-0.32	25.03%
3/31/2020	\$6.42	-1.38%	-0.95%	-2.32%	-3.21%	1.83%	1.95%	0.94	65.18%
4/1/2020	\$5.96	-7.17%	-3.86%	-1.57%	-6.48%	-0.68%	1.95%	-0.35	27.42%
4/2/2020	\$6.02	1.01%	1.22%	0.48%	2.06%	-1.06%	1.94%	-0.54	41.35%
4/3/2020	\$5.90	-1.99%	-1.45%	-0.68%	-2.51%	0.52%	1.94%	0.27	21.06%
4/6/2020	\$6.38	8.14%	5.89%	-2.06%	6.33%	1.80%	1.95%	0.93	64.50%
4/7/2020	\$6.64	4.07%	0.72%	0.84%	1.67%	2.41%	1.95%	1.24	78.27%
4/8/2020	\$6.54	-1.51%	2.38%	0.53%	3.69%	-5.20%	1.95%	-2.67	99.19%
4/9/2020	\$6.69	2.29%	1.58%	4.38%	5.62%	-3.33%	1.97%	-1.69	90.69%
4/13/2020	\$6.52	-2.54%	-0.71%	-2.20%	-2.55%	0.01%	1.99%	0.00	0.33%
4/14/2020	\$6.85	5.06%	2.56%	-5.01%	-0.22%	5.29%	1.99%	2.66	99.16%
4/15/2020	\$6.23	-9.05%	-2.32%	-2.27%	-4.57%	-4.48%	2.01%	-2.23	97.33%
4/16/2020	\$6.22	-0.16%	0.21%	-3.56%	-2.12%	1.96%	2.03%	0.97	66.51%
4/17/2020	\$6.54	5.14%	2.71%	3.79%	6.10%	-0.96%	2.03%	-0.47	36.23%
4/20/2020	\$6.33	-3.21%	-1.16%	-1.07%	-2.29%	-0.92%	2.03%	-0.45	34.81%
4/21/2020	\$6.08	-3.95%	-3.10%	1.12%	-3.59%	-0.36%	2.03%	-0.18	14.10%
4/22/2020	\$6.09	0.16%	1.86%	-1.84%	1.38%	-1.21%	2.03%	-0.60	45.03%
4/23/2020	\$6.18	1.48%	0.31%	0.18%	0.51%	0.97%	2.03%	0.48	36.64%
4/24/2020	\$5.95	-3.72%	0.67%	0.11%	0.97%	-4.70%	2.02%	-2.32	97.89%
4/27/2020	\$6.69	12.44%	1.75%	2.38%	3.87%	8.57%	2.05%	4.19	100.00%
4/28/2020	\$6.85	2.39%	0.04%	1.73%	1.27%	1.12%	2.11%	0.53	40.34%
4/29/2020	\$7.67	11.97%	2.34%	0.62%	3.72%	8.25%	2.11%	3.91	99.99%
4/30/2020	\$7.41	-3.39%	-0.86%	-1.59%	-2.30%	-1.09%	2.11%	-0.52	39.43%
5/1/2020	\$7.15	-3.51%	-2.34%	0.24%	-3.09%	-0.42%	2.11%	-0.20	15.63%
5/4/2020	\$7.05	-1.40%	-0.35%	-0.68%	-0.96%	-0.44%	2.12%	-0.21	16.41%
5/5/2020	\$6.97	-1.14%	1.02%	-2.18%	-0.10%	-1.04%	2.12%	-0.49	37.65%
5/6/2020	\$6.80	-2.44%	-0.52%	-0.62%	-1.17%	-1.27%	2.11%	-0.60	45.09%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
5/7/2020	\$6.99	2.79%	0.92%	0.67%	1.76%	1.04%	2.11%	0.49	37.59%
5/8/2020	\$7.13	2.00%	1.77%	-0.22%	2.31%	-0.31%	2.11%	-0.15	11.57%
5/11/2020	\$6.93	-2.81%	-0.06%	-2.93%	-2.19%	-0.62%	2.12%	-0.29	23.00%
5/12/2020	\$6.91	-0.29%	-1.29%	-0.93%	-2.49%	2.20%	2.11%	1.04	70.11%
5/13/2020	\$6.60	-4.49%	-1.75%	-0.80%	-3.01%	-1.48%	2.12%	-0.70	51.43%
5/14/2020	\$6.66	0.91%	0.07%	2.68%	2.01%	-1.11%	2.12%	-0.52	39.78%
5/15/2020	\$6.44	-3.30%	0.43%	-1.79%	-0.68%	-2.63%	2.12%	-1.24	78.32%
5/18/2020	\$7.13	10.71%	3.02%	2.15%	5.73%	4.98%	2.13%	2.33	97.95%
5/19/2020	\$7.06	-0.98%	-0.37%	-1.79%	-1.85%	0.87%	2.15%	0.40	31.38%
5/20/2020	\$7.51	6.37%	1.49%	0.58%	2.56%	3.82%	2.15%	1.78	92.30%
5/21/2020	\$7.36	-2.00%	-0.86%	0.21%	-1.02%	-0.98%	2.16%	-0.45	34.91%
5/22/2020	\$7.32	-0.54%	-0.11%	-1.39%	-1.17%	0.63%	2.16%	0.29	22.84%
5/26/2020	\$8.21	12.16%	2.04%	3.98%	5.96%	6.20%	2.17%	2.86	99.54%
5/27/2020	\$8.68	5.72%	1.07%	4.59%	5.41%	0.31%	2.20%	0.14	11.36%
5/28/2020	\$8.51	-1.96%	0.53%	-3.46%	-1.99%	0.03%	2.19%	0.01	1.15%
5/29/2020	\$8.40	-1.29%	-0.02%	-2.52%	-2.03%	0.74%	2.19%	0.34	26.28%
6/1/2020	\$8.69	3.45%	0.75%	1.28%	2.23%	1.22%	2.20%	0.55	42.00%
6/2/2020	\$8.90	2.42%	1.07%	-0.37%	1.34%	1.08%	2.19%	0.49	37.54%
6/3/2020	\$9.22	3.60%	1.62%	2.67%	4.67%	-1.08%	2.19%	-0.49	37.64%
6/4/2020	\$9.49	2.93%	-0.18%	2.57%	1.96%	0.97%	2.19%	0.44	34.01%
6/5/2020	\$9.69	2.11%	2.18%	1.57%	4.56%	-2.45%	2.19%	-1.12	73.65%
6/8/2020	\$10.20	5.26%	0.94%	0.75%	2.11%	3.15%	2.19%	1.44	84.87%
6/9/2020	\$9.82	-3.72%	-0.56%	-1.58%	-1.95%	-1.77%	2.20%	-0.81	58.04%
6/10/2020	\$9.78	-0.41%	-0.35%	-3.68%	-3.39%	2.99%	2.19%	1.36	82.52%
6/11/2020	\$9.00	-7.98%	-4.98%	-1.51%	-8.34%	0.36%	2.20%	0.16	13.09%
6/12/2020	\$9.39	4.33%	0.47%	2.92%	3.12%	1.21%	2.20%	0.55	41.81%
6/15/2020	\$9.47	0.85%	0.32%	0.49%	1.02%	-0.16%	2.21%	-0.07	5.92%
6/16/2020	\$9.55	0.85%	2.19%	-1.62%	2.08%	-1.23%	2.20%	-0.56	42.28%
6/17/2020	\$9.34	-2.20%	-0.05%	-2.14%	-1.66%	-0.54%	2.20%	-0.24	19.31%
6/18/2020	\$9.24	-1.07%	-0.10%	-0.07%	-0.07%	-1.00%	2.20%	-0.45	34.95%
6/19/2020	\$9.22	-0.22%	-0.30%	0.11%	-0.23%	0.02%	2.20%	0.01	0.65%
6/22/2020	\$9.35	1.41%	0.40%	-1.64%	-0.62%	2.03%	2.21%	0.92	64.18%
6/23/2020	\$9.55	2.14%	0.82%	0.16%	1.45%	0.69%	2.20%	0.31	24.38%
6/24/2020	\$9.12	-4.50%	-2.50%	0.30%	-3.29%	-1.22%	2.20%	-0.55	41.96%
6/25/2020	\$9.57	4.93%	0.61%	2.61%	3.11%	1.82%	2.20%	0.83	59.02%
6/26/2020	\$9.00	-5.96%	-1.65%	-2.40%	-4.22%	-1.74%	2.21%	-0.79	56.77%
6/29/2020	\$9.46	5.11%	0.89%	-0.22%	1.26%	3.86%	2.21%	1.74	91.75%
6/30/2020	\$9.52	0.63%	1.16%	-0.73%	1.26%	-0.62%	2.22%	-0.28	22.10%
7/1/2020	\$9.32	-2.10%	0.43%	-1.87%	-0.74%	-1.36%	2.22%	-0.61	45.97%
7/2/2020	\$9.53	2.25%	0.74%	0.18%	1.36%	0.89%	2.22%	0.40	31.27%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
7/6/2020	\$9.95	4.41%	1.64%	0.32%	2.78%	1.62%	2.22%	0.73	53.54%
7/7/2020	\$9.82	-1.31%	-0.93%	-1.40%	-2.39%	1.08%	2.21%	0.49	37.41%
7/8/2020	\$10.00	1.83%	0.42%	-0.05%	0.70%	1.13%	2.21%	0.51	38.98%
7/9/2020	\$9.72	-2.80%	-0.53%	-1.36%	-1.73%	-1.07%	2.18%	-0.49	37.50%
7/10/2020	\$10.10	3.91%	0.84%	3.67%	4.39%	-0.48%	2.18%	-0.22	17.46%
7/13/2020	\$9.73	-3.66%	-0.26%	0.90%	0.51%	-4.17%	2.18%	-1.92	94.35%
7/14/2020	\$10.02	2.98%	0.75%	-1.05%	0.41%	2.57%	2.18%	1.18	76.16%
7/15/2020	\$10.19	1.70%	1.24%	-0.08%	1.91%	-0.22%	2.18%	-0.10	7.97%
7/16/2020	\$10.04	-1.47%	-0.43%	-0.20%	-0.65%	-0.82%	2.18%	-0.38	29.45%
7/17/2020	\$9.97	-0.70%	0.22%	-2.24%	-1.36%	0.66%	2.17%	0.30	23.90%
7/20/2020	\$10.18	2.11%	0.83%	-1.13%	0.45%	1.66%	2.18%	0.76	55.42%
7/21/2020	\$9.74	-4.32%	0.37%	1.95%	2.26%	-6.58%	2.17%	-3.03	99.73%
7/22/2020	\$9.83	0.92%	0.27%	-0.97%	-0.24%	1.16%	2.21%	0.53	40.02%
7/23/2020	\$9.62	-2.14%	-0.84%	1.44%	0.00%	-2.14%	2.21%	-0.97	66.51%
7/24/2020	\$9.61	-0.10%	-0.72%	0.45%	-0.59%	0.49%	2.21%	0.22	17.39%
7/27/2020	\$9.55	-0.62%	0.87%	-2.37%	-0.42%	-0.20%	2.22%	-0.09	7.34%
7/28/2020	\$9.45	-1.05%	-0.51%	1.14%	0.25%	-1.30%	2.21%	-0.59	44.12%
7/29/2020	\$9.22	-2.43%	0.86%	1.03%	2.17%	-4.60%	2.21%	-2.08	96.11%
7/30/2020	\$9.00	-2.39%	-0.68%	-1.56%	-2.08%	-0.31%	2.22%	-0.14	11.09%
7/31/2020	\$8.92	-0.89%	0.04%	-0.40%	-0.14%	-0.75%	2.22%	-0.34	26.49%
8/3/2020	\$9.22	3.36%	0.83%	-1.25%	0.36%	3.00%	2.21%	1.36	82.42%
8/4/2020	\$9.25	0.33%	0.55%	-0.45%	0.57%	-0.24%	2.22%	-0.11	8.64%
8/5/2020	\$9.34	0.97%	0.82%	0.13%	1.40%	-0.42%	2.21%	-0.19	15.16%
8/6/2020	\$9.22	-1.28%	0.17%	-0.33%	0.09%	-1.37%	2.21%	-0.62	46.54%
8/7/2020	\$9.22	0.00%	-0.17%	2.00%	1.34%	-1.34%	2.21%	-0.60	45.42%
8/10/2020	\$9.42	2.17%	0.21%	1.03%	1.17%	1.00%	2.22%	0.45	34.77%
8/11/2020	\$9.56	1.49%	-0.06%	2.51%	1.89%	-0.40%	2.21%	-0.18	14.32%
8/12/2020	\$9.71	1.57%	1.37%	-2.06%	0.61%	0.96%	2.21%	0.43	33.52%
8/13/2020	\$9.55	-1.65%	-0.07%	-1.02%	-0.71%	-0.94%	2.18%	-0.43	33.41%
8/14/2020	\$9.52	-0.31%	-0.25%	0.43%	0.07%	-0.39%	2.17%	-0.18	14.18%
8/17/2020	\$9.46	-0.63%	0.41%	-2.45%	-1.03%	0.40%	2.13%	0.19	15.01%
8/18/2020	\$9.40	-0.63%	0.23%	-1.69%	-0.76%	0.12%	2.12%	0.06	4.66%
8/19/2020	\$9.54	1.49%	-0.20%	0.57%	0.23%	1.26%	2.12%	0.59	44.70%
8/20/2020	\$9.34	-2.10%	-0.22%	-0.86%	-0.81%	-1.29%	2.12%	-0.61	45.64%
8/21/2020	\$9.18	-1.71%	0.12%	-0.53%	-0.08%	-1.63%	2.12%	-0.77	55.81%
8/24/2020	\$9.59	4.47%	1.04%	1.32%	2.57%	1.90%	2.13%	0.89	62.71%
8/25/2020	\$9.64	0.52%	0.24%	0.18%	0.61%	-0.08%	2.13%	-0.04	3.18%
8/26/2020	\$9.81	1.76%	0.95%	-2.37%	-0.21%	1.98%	2.12%	0.93	64.70%
8/27/2020	\$9.73	-0.82%	-0.13%	1.86%	1.26%	-2.07%	2.13%	-0.97	66.92%
8/28/2020	\$9.89	1.64%	0.58%	0.38%	1.22%	0.43%	2.13%	0.20	15.97%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
8/31/2020	\$9.53	-3.64%	-0.05%	-2.14%	-1.48%	-2.16%	2.14%	-1.01	68.63%
9/1/2020	\$9.52	-0.10%	0.48%	-1.13%	-0.01%	-0.09%	2.14%	-0.04	3.43%
9/2/2020	\$9.45	-0.74%	1.09%	-0.43%	1.37%	-2.10%	2.13%	-0.99	67.49%
9/3/2020	\$9.29	-1.69%	-2.74%	3.64%	-1.25%	-0.45%	2.13%	-0.21	16.52%
9/4/2020	\$9.73	4.74%	-1.08%	4.24%	1.59%	3.15%	2.13%	1.48	85.95%
9/8/2020	\$9.41	-3.29%	-1.88%	-0.56%	-2.99%	-0.30%	2.14%	-0.14	10.97%
9/9/2020	\$9.42	0.11%	1.67%	-1.52%	1.36%	-1.26%	2.14%	-0.59	44.31%
9/10/2020	\$9.35	-0.74%	-1.08%	0.55%	-1.06%	0.32%	2.14%	0.15	11.76%
9/11/2020	\$9.26	-0.96%	0.01%	0.77%	0.66%	-1.62%	2.14%	-0.76	54.94%
9/14/2020	\$9.34	0.86%	1.19%	-1.37%	0.76%	0.11%	2.15%	0.05	3.92%
9/15/2020	\$9.10	-2.57%	0.48%	-3.25%	-1.63%	-0.94%	2.15%	-0.44	33.94%
9/16/2020	\$9.29	2.09%	-0.19%	1.04%	0.56%	1.53%	2.14%	0.71	52.43%
9/17/2020	\$9.24	-0.54%	-0.83%	0.38%	-0.83%	0.29%	2.14%	0.14	10.84%
9/18/2020	\$9.09	-1.62%	-0.65%	0.04%	-0.82%	-0.80%	2.14%	-0.37	29.11%
9/21/2020	\$8.34	-8.25%	-1.63%	-1.08%	-3.03%	-5.22%	2.14%	-2.44	98.46%
9/22/2020	\$8.14	-2.40%	0.60%	-2.29%	-0.77%	-1.63%	2.14%	-0.76	55.17%
9/23/2020	\$8.05	-1.11%	-1.61%	0.37%	-1.94%	0.83%	2.14%	0.39	30.30%
9/24/2020	\$8.11	0.75%	-0.23%	0.60%	0.20%	0.55%	2.14%	0.26	20.11%
9/25/2020	\$8.00	-1.36%	1.15%	-1.74%	0.43%	-1.78%	2.14%	-0.83	59.42%
9/28/2020	\$8.43	5.37%	1.70%	1.41%	3.54%	1.83%	2.14%	0.86	60.79%
9/29/2020	\$8.27	-1.90%	-0.29%	-0.85%	-0.96%	-0.94%	2.14%	-0.44	33.99%
9/30/2020	\$8.40	1.57%	0.32%	0.81%	1.14%	0.43%	2.14%	0.20	15.94%
10/1/2020	\$8.36	-0.48%	0.54%	-0.50%	0.47%	-0.95%	2.14%	-0.44	34.12%
10/2/2020	\$8.50	1.67%	-0.74%	2.09%	0.58%	1.10%	2.14%	0.51	39.10%
10/5/2020	\$8.70	2.35%	1.74%	-0.60%	2.10%	0.25%	2.14%	0.12	9.38%
10/6/2020	\$9.01	3.56%	-0.87%	0.99%	-0.42%	3.99%	2.14%	1.86	93.63%
10/7/2020	\$9.23	2.44%	1.13%	0.26%	1.87%	0.57%	2.14%	0.27	21.01%
10/8/2020	\$9.36	1.41%	0.75%	0.28%	1.35%	0.06%	2.14%	0.03	2.35%
10/9/2020	\$9.28	-0.86%	0.84%	-1.43%	0.21%	-1.07%	2.14%	-0.50	38.20%
10/12/2020	\$9.34	0.65%	1.23%	-0.56%	1.41%	-0.76%	2.14%	-0.36	27.79%
10/13/2020	\$9.11	-2.46%	-0.55%	-1.74%	-2.00%	-0.47%	2.14%	-0.22	17.19%
10/14/2020	\$9.06	-0.55%	-0.43%	-1.27%	-1.48%	0.93%	2.14%	0.43	33.48%
10/15/2020	\$9.02	-0.44%	-0.72%	2.30%	0.76%	-1.21%	2.14%	-0.56	42.64%
10/16/2020	\$9.25	2.55%	0.17%	0.14%	0.43%	2.12%	2.14%	0.99	67.80%
10/19/2020	\$9.28	0.32%	-0.91%	0.53%	-0.82%	1.15%	2.14%	0.54	40.71%
10/20/2020	\$9.60	3.45%	0.20%	1.28%	1.31%	2.14%	2.14%	1.00	68.17%
10/21/2020	\$9.41	-1.98%	-0.20%	-0.40%	-0.51%	-1.47%	2.14%	-0.69	50.84%
10/22/2020	\$9.45	0.43%	0.13%	2.63%	2.21%	-1.79%	2.14%	-0.84	59.61%
10/23/2020	\$9.65	2.12%	0.39%	0.60%	1.09%	1.03%	2.14%	0.48	36.95%
10/26/2020	\$9.54	-1.14%	-1.66%	0.94%	-1.59%	0.45%	2.14%	0.21	16.63%

Exhibit 11B**Deutsche Bank AG (US)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
10/27/2020	\$9.25	-3.04%	-0.35%	-1.51%	-1.55%	-1.49%	2.14%	-0.70	51.42%
10/28/2020	\$9.25	0.00%	-3.15%	2.01%	-2.90%	2.90%	2.14%	1.35	82.30%
10/29/2020	\$9.24	-0.11%	0.51%	-0.04%	0.77%	-0.88%	2.14%	-0.41	31.97%
10/30/2020	\$9.25	0.11%	-1.10%	2.47%	0.35%	-0.24%	2.14%	-0.11	8.85%
11/2/2020	\$9.64	4.22%	1.27%	0.16%	2.01%	2.21%	2.14%	1.03	69.68%
11/3/2020	\$9.96	3.32%	2.03%	0.91%	3.63%	-0.31%	2.14%	-0.15	11.62%
11/4/2020	\$9.92	-0.40%	2.00%	-6.16%	-1.66%	1.26%	2.14%	0.59	44.23%
11/5/2020	\$10.05	1.31%	2.07%	0.62%	3.48%	-2.16%	2.14%	-1.01	68.73%
11/6/2020	\$10.15	1.00%	0.14%	-0.87%	-0.37%	1.36%	2.14%	0.64	47.58%
11/9/2020	\$10.62	4.63%	1.30%	11.00%	10.08%	-5.45%	2.14%	-2.55	98.84%
11/10/2020	\$10.72	0.94%	0.20%	0.29%	0.58%	0.36%	2.14%	0.17	13.48%
11/11/2020	\$10.48	-2.24%	0.84%	-1.72%	0.00%	-2.24%	2.14%	-1.04	70.29%
11/12/2020	\$10.41	-0.67%	-0.75%	-0.83%	-1.60%	0.94%	2.14%	0.44	33.77%
11/13/2020	\$10.73	3.07%	0.80%	0.14%	1.32%	1.76%	2.14%	0.82	58.79%
11/16/2020	\$10.79	0.56%	1.27%	0.97%	2.60%	-2.04%	2.14%	-0.95	65.92%
11/17/2020	\$10.82	0.28%	-0.12%	0.00%	-0.09%	0.37%	2.14%	0.17	13.60%
11/18/2020	\$10.72	-0.92%	-0.59%	0.23%	-0.59%	-0.34%	2.14%	-0.16	12.45%
11/19/2020	\$10.75	0.28%	0.12%	0.56%	0.66%	-0.38%	2.14%	-0.18	14.08%
11/20/2020	\$10.69	-0.56%	-0.25%	-0.17%	-0.40%	-0.16%	2.14%	-0.08	5.97%
11/23/2020	\$11.04	3.27%	0.27%	2.04%	1.98%	1.30%	2.14%	0.61	45.48%
11/24/2020	\$11.46	3.80%	1.58%	2.97%	4.53%	-0.72%	2.14%	-0.34	26.39%
11/25/2020	\$11.37	-0.78%	0.10%	-0.56%	-0.20%	-0.58%	2.14%	-0.27	21.48%
11/27/2020	\$11.36	-0.09%	0.45%	-0.96%	0.01%	-0.10%	2.14%	-0.05	3.78%
11/30/2020	\$11.12	-2.11%	-0.70%	-1.84%	-2.28%	0.17%	2.14%	0.08	6.30%
12/1/2020	\$11.45	2.97%	1.00%	1.08%	2.30%	0.67%	2.14%	0.31	24.47%
12/2/2020	\$11.58	1.14%	0.19%	1.66%	1.58%	-0.44%	2.14%	-0.21	16.38%
12/3/2020	\$11.77	1.64%	0.28%	-0.46%	0.13%	1.51%	2.14%	0.70	51.76%
12/4/2020	\$11.77	0.00%	0.70%	0.41%	1.38%	-1.38%	2.14%	-0.64	47.92%
12/7/2020	\$11.58	-1.61%	-0.14%	-0.82%	-0.73%	-0.88%	2.14%	-0.41	31.88%
12/8/2020	\$11.44	-1.21%	0.23%	-0.66%	-0.08%	-1.13%	2.14%	-0.53	40.29%
12/9/2020	\$11.23	-1.84%	-0.55%	0.90%	-0.04%	-1.80%	2.14%	-0.84	59.88%
12/10/2020	\$11.00	-2.05%	0.04%	-0.11%	0.05%	-2.10%	2.14%	-0.98	67.24%
12/11/2020	\$10.62	-3.45%	-0.25%	-0.96%	-1.00%	-2.46%	2.14%	-1.15	74.82%
12/14/2020	\$10.61	-0.09%	-0.09%	-0.11%	-0.14%	0.04%	2.14%	0.02	1.52%
12/15/2020	\$10.85	2.26%	0.93%	0.46%	1.74%	0.52%	2.14%	0.24	19.33%
12/16/2020	\$10.95	0.92%	0.42%	-0.63%	0.21%	0.72%	2.14%	0.33	26.17%
12/17/2020	\$11.13	1.64%	0.76%	-1.14%	0.31%	1.34%	2.14%	0.62	46.69%

Exhibit 11C**Deutsche Bank AG (US)**

Companies Used in the Industry Index

Source: Bloomberg

Number	Company Name	Bloomberg Symbol
1	Bank of America Corp	BAC US Equity
2	Barclays PLC	BCS US Equity
3	BNP Paribas SA	BNPQY US Equity
4	Citigroup Inc	C US Equity
5	Credit Suisse Group AG	CS US Equity
6	HSBC Holdings PLC	HSBC US Equity
7	JPMorgan Chase & Co	JPM US Equity
8	Societe Generale SA	SCGLY US Equity
9	UBS Group AG	UBS US Equity

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
3/14/2017	3/14/2016	3/13/2017	244	0.6061	0.6028	0.0183	1.857	-0.07%	2.358	13.55	1.583	13.68
3/15/2017	3/15/2016	3/14/2017	244	0.6070	0.6037	0.0182	1.856	-0.07%	2.358	13.58	1.585	13.71
3/16/2017	3/16/2016	3/15/2017	244	0.6060	0.6028	0.0182	1.846	-0.07%	2.351	13.52	1.585	13.71
3/17/2017	3/17/2016	3/16/2017	244	0.6096	0.6063	0.0181	1.867	-0.06%	2.333	13.57	1.583	13.86
3/20/2017	3/20/2016	3/19/2017	243	0.6115	0.6082	0.0181	1.875	-0.05%	2.419	13.92	1.588	13.56
3/21/2017	3/21/2016	3/20/2017	244	0.6112	0.6079	0.0181	1.872	-0.06%	2.426	13.94	1.593	13.58
3/22/2017	3/22/2016	3/21/2017	244	0.6143	0.6111	0.0182	1.851	-0.09%	2.455	14.02	1.612	13.69
3/23/2017	3/23/2016	3/22/2017	244	0.6145	0.6113	0.0182	1.868	-0.08%	2.458	14.05	1.610	13.66
3/24/2017	3/24/2016	3/23/2017	244	0.6131	0.6099	0.0182	1.871	-0.08%	2.446	13.98	1.609	13.66
3/27/2017	3/27/2016	3/26/2017	244	0.6108	0.6076	0.0182	1.872	-0.08%	2.435	13.84	1.610	13.66
3/28/2017	3/28/2016	3/27/2017	245	0.6108	0.6076	0.0182	1.872	-0.08%	2.432	13.86	1.610	13.70
3/29/2017	3/29/2016	3/28/2017	246	0.6121	0.6090	0.0181	1.872	-0.07%	2.440	13.95	1.611	13.75
3/30/2017	3/30/2016	3/29/2017	246	0.6103	0.6071	0.0182	1.851	-0.05%	2.452	13.98	1.607	13.61
3/31/2017	3/31/2016	3/30/2017	246	0.6150	0.6118	0.0181	1.877	-0.04%	2.521	14.32	1.591	13.53
4/3/2017	4/3/2016	4/2/2017	245	0.6147	0.6115	0.0181	1.884	-0.04%	2.533	14.30	1.589	13.47
4/4/2017	4/4/2016	4/3/2017	246	0.6162	0.6130	0.0181	1.883	-0.05%	2.540	14.41	1.587	13.51
4/5/2017	4/5/2016	4/4/2017	246	0.6155	0.6123	0.0181	1.880	-0.04%	2.543	14.41	1.587	13.47
4/6/2017	4/6/2016	4/5/2017	246	0.6117	0.6085	0.0181	1.878	-0.04%	2.518	14.18	1.586	13.48
4/7/2017	4/7/2016	4/6/2017	246	0.6112	0.6080	0.0181	1.876	-0.03%	2.513	14.15	1.589	13.49
4/10/2017	4/10/2016	4/9/2017	245	0.6103	0.6071	0.0181	1.873	-0.03%	2.504	14.06	1.591	13.47
4/11/2017	4/11/2016	4/10/2017	246	0.6101	0.6069	0.0180	1.872	-0.03%	2.504	14.09	1.590	13.48
4/12/2017	4/12/2016	4/11/2017	246	0.6107	0.6075	0.0180	1.874	-0.03%	2.507	14.11	1.591	13.50
4/13/2017	4/13/2016	4/12/2017	246	0.6117	0.6085	0.0180	1.870	-0.02%	2.511	14.14	1.592	13.52
4/18/2017	4/18/2016	4/17/2017	244	0.5951	0.5917	0.0180	1.859	-0.05%	2.434	13.57	1.577	13.04
4/19/2017	4/19/2016	4/18/2017	244	0.5957	0.5924	0.0180	1.851	-0.06%	2.436	13.60	1.575	13.04
4/20/2017	4/20/2016	4/19/2017	244	0.5981	0.5948	0.0180	1.828	-0.04%	2.472	13.74	1.571	13.04
4/21/2017	4/21/2016	4/20/2017	244	0.5974	0.5940	0.0179	1.839	-0.06%	2.466	13.78	1.556	12.95
4/24/2017	4/24/2016	4/23/2017	243	0.5965	0.5932	0.0179	1.827	-0.07%	2.483	13.80	1.554	12.82
4/25/2017	4/25/2016	4/24/2017	244	0.6051	0.6018	0.0181	1.805	-0.05%	2.560	14.25	1.573	12.90
4/26/2017	4/26/2016	4/25/2017	244	0.5999	0.5966	0.0181	1.847	-0.04%	2.539	14.12	1.555	12.73
4/27/2017	4/27/2016	4/26/2017	244	0.5960	0.5927	0.0182	1.866	-0.04%	2.538	14.04	1.546	12.58
4/28/2017	4/28/2016	4/27/2017	243	0.5964	0.5931	0.0182	1.862	-0.05%	2.541	14.04	1.544	12.55
5/2/2017	5/2/2016	5/1/2017	243	0.5912	0.5878	0.0182	1.868	-0.04%	2.519	13.78	1.543	12.54
5/3/2017	5/3/2016	5/2/2017	243	0.5968	0.5935	0.0181	1.898	-0.03%	2.532	13.97	1.541	12.66
5/4/2017	5/4/2016	5/3/2017	243	0.5891	0.5857	0.0180	1.891	-0.01%	2.489	13.68	1.532	12.53
5/5/2017	5/5/2016	5/4/2017	243	0.5911	0.5877	0.0180	1.883	-0.01%	2.504	13.73	1.533	12.58
5/8/2017	5/8/2016	5/7/2017	242	0.5927	0.5893	0.0180	1.870	0.00%	2.510	13.78	1.528	12.57
5/9/2017	5/9/2016	5/8/2017	243	0.5924	0.5890	0.0180	1.870	0.00%	2.510	13.80	1.526	12.58
5/10/2017	5/10/2016	5/9/2017	243	0.5921	0.5887	0.0180	1.871	0.00%	2.512	13.81	1.525	12.56
5/11/2017	5/11/2016	5/10/2017	243	0.5909	0.5875	0.0180	1.867	0.00%	2.512	13.74	1.526	12.56
5/12/2017	5/12/2016	5/11/2017	243	0.5923	0.5889	0.0179	1.859	0.01%	2.512	13.79	1.525	12.59
5/15/2017	5/15/2016	5/14/2017	242	0.5936	0.5902	0.0179	1.860	0.00%	2.517	13.77	1.531	12.63
5/16/2017	5/16/2016	5/15/2017	243	0.5943	0.5909	0.0179	1.860	0.00%	2.521	13.83	1.531	12.66

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
5/17/2017	5/17/2016	5/16/2017	244	0.5939	0.5905	0.0179	1.862	0.00%	2.520	13.84	1.532	12.68
5/18/2017	5/18/2016	5/17/2017	244	0.5970	0.5937	0.0179	1.868	0.00%	2.539	14.02	1.519	12.67
5/19/2017	5/19/2016	5/18/2017	244	0.5954	0.5921	0.0179	1.855	-0.01%	2.541	14.04	1.531	12.55
5/22/2017	5/22/2016	5/21/2017	243	0.5976	0.5943	0.0179	1.852	-0.03%	2.638	14.36	1.508	12.26
5/23/2017	5/23/2016	5/22/2017	244	0.5978	0.5944	0.0178	1.853	-0.03%	2.633	14.37	1.508	12.32
5/24/2017	5/24/2016	5/23/2017	244	0.5987	0.5954	0.0178	1.853	-0.04%	2.637	14.40	1.509	12.34
5/25/2017	5/25/2016	5/24/2017	244	0.5970	0.5937	0.0178	1.850	-0.04%	2.636	14.33	1.508	12.32
5/26/2017	5/26/2016	5/25/2017	244	0.5947	0.5914	0.0178	1.850	-0.05%	2.620	14.18	1.509	12.35
5/30/2017	5/30/2016	5/29/2017	243	0.5954	0.5920	0.0179	1.848	-0.06%	2.623	14.17	1.515	12.35
5/31/2017	5/31/2016	5/30/2017	244	0.5958	0.5925	0.0178	1.846	-0.07%	2.625	14.19	1.518	12.40
6/1/2017	6/1/2016	5/31/2017	244	0.5988	0.5955	0.0178	1.851	-0.08%	2.630	14.24	1.517	12.53
6/2/2017	6/2/2016	6/1/2017	244	0.5978	0.5945	0.0178	1.853	-0.07%	2.620	14.19	1.515	12.52
6/6/2017	6/6/2016	6/5/2017	243	0.5947	0.5913	0.0178	1.848	-0.06%	2.619	14.20	1.509	12.27
6/7/2017	6/7/2016	6/6/2017	243	0.5968	0.5934	0.0178	1.837	-0.06%	2.630	14.27	1.513	12.31
6/8/2017	6/8/2016	6/7/2017	243	0.5984	0.5951	0.0178	1.840	-0.05%	2.626	14.27	1.523	12.41
6/9/2017	6/9/2016	6/8/2017	243	0.5974	0.5941	0.0178	1.832	-0.04%	2.627	14.26	1.510	12.36
6/12/2017	6/12/2016	6/11/2017	242	0.5929	0.5895	0.0178	1.831	-0.03%	2.607	14.00	1.508	12.34
6/13/2017	6/13/2016	6/12/2017	243	0.5931	0.5897	0.0178	1.826	-0.03%	2.611	14.07	1.504	12.33
6/14/2017	6/14/2016	6/13/2017	243	0.5916	0.5882	0.0177	1.827	-0.03%	2.601	13.95	1.509	12.37
6/15/2017	6/15/2016	6/14/2017	243	0.5908	0.5874	0.0177	1.826	-0.05%	2.606	13.83	1.505	12.46
6/16/2017	6/16/2016	6/15/2017	243	0.5890	0.5856	0.0178	1.816	-0.04%	2.597	13.79	1.486	12.40
6/19/2017	6/19/2016	6/18/2017	242	0.5833	0.5799	0.0178	1.821	-0.06%	2.575	13.53	1.480	12.31
6/20/2017	6/20/2016	6/19/2017	243	0.5839	0.5804	0.0178	1.821	-0.06%	2.581	13.61	1.478	12.32
6/21/2017	6/21/2016	6/20/2017	243	0.5784	0.5749	0.0177	1.837	-0.06%	2.579	13.26	1.488	12.39
6/22/2017	6/22/2016	6/21/2017	243	0.5795	0.5760	0.0177	1.841	-0.06%	2.582	13.32	1.484	12.39
6/23/2017	6/23/2016	6/22/2017	243	0.5791	0.5756	0.0177	1.844	-0.07%	2.577	13.28	1.485	12.40
6/26/2017	6/26/2016	6/25/2017	242	0.5225	0.5185	0.0177	1.816	-0.05%	2.345	10.63	1.480	12.19
6/27/2017	6/27/2016	6/26/2017	243	0.5225	0.5185	0.0177	1.817	-0.05%	2.346	10.65	1.480	12.21
6/28/2017	6/28/2016	6/27/2017	243	0.5245	0.5205	0.0175	1.839	-0.04%	2.361	10.14	1.539	12.73
6/29/2017	6/29/2016	6/28/2017	243	0.5251	0.5212	0.0175	1.797	-0.03%	2.391	10.18	1.534	12.72
6/30/2017	6/30/2016	6/29/2017	243	0.5536	0.5498	0.0169	1.892	-0.02%	2.666	11.09	1.526	13.22
7/3/2017	7/3/2016	7/2/2017	242	0.5622	0.5585	0.0168	1.892	0.00%	2.767	11.45	1.521	13.25
7/5/2017	7/5/2016	7/4/2017	243	0.5656	0.5620	0.0167	1.897	0.01%	2.785	11.56	1.522	13.37
7/6/2017	7/6/2016	7/5/2017	243	0.5655	0.5619	0.0167	1.854	0.02%	2.774	11.41	1.544	13.50
7/7/2017	7/7/2016	7/6/2017	243	0.5656	0.5620	0.0166	1.890	0.05%	2.700	11.20	1.547	13.68
7/10/2017	7/10/2016	7/9/2017	242	0.5692	0.5656	0.0165	1.912	0.06%	2.721	11.22	1.553	13.78
7/11/2017	7/11/2016	7/10/2017	243	0.5692	0.5656	0.0164	1.914	0.05%	2.712	11.21	1.555	13.83
7/12/2017	7/12/2016	7/11/2017	243	0.5672	0.5636	0.0165	1.902	0.06%	2.721	11.13	1.553	13.81
7/13/2017	7/13/2016	7/12/2017	243	0.5601	0.5564	0.0164	1.914	0.03%	2.577	10.62	1.552	13.88
7/14/2017	7/14/2016	7/13/2017	243	0.5590	0.5554	0.0164	1.915	0.04%	2.576	10.62	1.552	13.84
7/17/2017	7/17/2016	7/16/2017	242	0.5583	0.5546	0.0164	1.906	0.02%	2.536	10.42	1.565	13.91
7/18/2017	7/18/2016	7/17/2017	243	0.5583	0.5546	0.0163	1.906	0.02%	2.534	10.44	1.565	13.94
7/19/2017	7/19/2016	7/18/2017	243	0.5613	0.5576	0.0163	1.915	0.01%	2.540	10.47	1.575	14.05

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
7/20/2017	7/20/2016	7/19/2017	243	0.5611	0.5575	0.0163	1.915	0.02%	2.515	10.39	1.577	14.10
7/21/2017	7/21/2016	7/20/2017	243	0.5609	0.5573	0.0163	1.913	0.01%	2.504	10.33	1.578	14.14
7/24/2017	7/24/2016	7/23/2017	242	0.5634	0.5598	0.0163	1.921	0.00%	2.509	10.37	1.580	14.18
7/25/2017	7/25/2016	7/24/2017	243	0.5630	0.5594	0.0163	1.919	0.01%	2.496	10.31	1.586	14.24
7/26/2017	7/26/2016	7/25/2017	243	0.5636	0.5599	0.0163	1.908	0.01%	2.510	10.37	1.575	14.22
7/27/2017	7/27/2016	7/26/2017	243	0.5653	0.5617	0.0162	1.934	0.03%	2.513	10.42	1.573	14.27
7/28/2017	7/28/2016	7/27/2017	243	0.5653	0.5617	0.0162	1.934	0.03%	2.513	10.42	1.573	14.27
7/31/2017	7/31/2016	7/30/2017	242	0.5673	0.5637	0.0161	1.960	0.05%	2.541	10.51	1.561	14.24
8/1/2017	8/1/2016	7/31/2017	243	0.5635	0.5599	0.0162	1.955	0.04%	2.536	10.45	1.559	14.17
8/2/2017	8/2/2016	8/1/2017	243	0.5627	0.5590	0.0162	1.961	0.05%	2.534	10.44	1.557	14.14
8/3/2017	8/3/2016	8/2/2017	243	0.5556	0.5519	0.0162	1.950	0.06%	2.479	10.10	1.553	14.07
8/4/2017	8/4/2016	8/3/2017	243	0.5632	0.5595	0.0160	1.967	0.06%	2.480	10.19	1.588	14.34
8/7/2017	8/7/2016	8/6/2017	242	0.5620	0.5583	0.0160	1.961	0.06%	2.443	10.01	1.600	14.37
8/8/2017	8/8/2016	8/7/2017	243	0.5623	0.5586	0.0160	1.961	0.06%	2.440	10.01	1.602	14.42
8/9/2017	8/9/2016	8/8/2017	243	0.5616	0.5580	0.0160	1.965	0.05%	2.429	9.98	1.597	14.42
8/10/2017	8/10/2016	8/9/2017	243	0.5660	0.5624	0.0160	1.947	0.04%	2.461	10.15	1.600	14.49
8/11/2017	8/11/2016	8/10/2017	243	0.5795	0.5760	0.0157	1.966	0.01%	2.507	10.54	1.613	14.82
8/14/2017	8/14/2016	8/13/2017	242	0.5805	0.5770	0.0158	1.963	0.02%	2.521	10.59	1.611	14.78
8/15/2017	8/15/2016	8/14/2017	243	0.5826	0.5791	0.0157	1.962	0.02%	2.540	10.74	1.612	14.82
8/16/2017	8/16/2016	8/15/2017	243	0.5832	0.5797	0.0157	1.966	0.02%	2.544	10.76	1.612	14.83
8/17/2017	8/17/2016	8/16/2017	243	0.5832	0.5797	0.0157	1.961	0.02%	2.542	10.74	1.613	14.85
8/18/2017	8/18/2016	8/17/2017	243	0.5878	0.5844	0.0156	1.978	0.02%	2.542	10.78	1.624	15.04
8/21/2017	8/21/2016	8/20/2017	242	0.5867	0.5833	0.0156	1.980	0.04%	2.505	10.64	1.624	15.04
8/22/2017	8/22/2016	8/21/2017	243	0.5885	0.5851	0.0156	1.983	0.03%	2.511	10.69	1.626	15.13
8/23/2017	8/23/2016	8/22/2017	243	0.5867	0.5833	0.0156	1.975	0.02%	2.489	10.61	1.626	15.10
8/24/2017	8/24/2016	8/23/2017	243	0.5845	0.5810	0.0156	1.983	0.02%	2.464	10.48	1.624	15.09
8/25/2017	8/25/2016	8/24/2017	243	0.5855	0.5820	0.0156	1.978	0.01%	2.484	10.59	1.617	15.06
8/28/2017	8/28/2016	8/27/2017	242	0.5851	0.5817	0.0156	1.979	0.00%	2.474	10.53	1.620	15.04
8/29/2017	8/29/2016	8/28/2017	243	0.5851	0.5817	0.0156	1.980	0.00%	2.475	10.55	1.619	15.07
8/30/2017	8/30/2016	8/29/2017	243	0.5875	0.5841	0.0156	1.959	-0.01%	2.484	10.59	1.628	15.16
8/31/2017	8/31/2016	8/30/2017	243	0.5885	0.5851	0.0155	1.980	-0.02%	2.503	10.73	1.616	15.10
9/1/2017	9/1/2016	8/31/2017	243	0.5896	0.5862	0.0154	1.975	-0.04%	2.513	10.83	1.607	15.08
9/5/2017	9/5/2016	9/4/2017	242	0.5887	0.5852	0.0154	1.977	-0.04%	2.514	10.74	1.606	15.05
9/6/2017	9/6/2016	9/5/2017	243	0.5888	0.5854	0.0154	1.974	-0.04%	2.528	10.84	1.594	15.04
9/7/2017	9/7/2016	9/6/2017	243	0.5856	0.5821	0.0155	1.964	-0.02%	2.566	10.97	1.582	14.79
9/8/2017	9/8/2016	9/7/2017	243	0.5853	0.5818	0.0155	1.957	-0.03%	2.553	10.91	1.572	14.82
9/11/2017	9/11/2016	9/10/2017	242	0.5959	0.5925	0.0152	1.944	-0.08%	2.794	11.90	1.527	14.52
9/12/2017	9/12/2016	9/11/2017	243	0.5975	0.5942	0.0152	1.947	-0.08%	2.809	12.03	1.528	14.55
9/13/2017	9/13/2016	9/12/2017	243	0.5986	0.5952	0.0152	1.944	-0.07%	2.825	11.99	1.532	14.63
9/14/2017	9/14/2016	9/13/2017	243	0.5977	0.5943	0.0152	1.936	-0.07%	2.829	11.92	1.532	14.64
9/15/2017	9/15/2016	9/14/2017	243	0.5997	0.5964	0.0151	1.935	-0.06%	2.833	11.97	1.536	14.71
9/18/2017	9/18/2016	9/17/2017	242	0.6013	0.5979	0.0147	1.955	-0.04%	2.737	11.82	1.514	14.86
9/19/2017	9/19/2016	9/18/2017	243	0.5991	0.5957	0.0148	1.941	-0.04%	2.735	11.81	1.507	14.80

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
9/20/2017	9/20/2016	9/19/2017	243	0.6103	0.6071	0.0145	2.003	-0.03%	2.811	12.27	1.503	15.02
9/21/2017	9/21/2016	9/20/2017	243	0.6093	0.6060	0.0145	2.012	-0.02%	2.790	12.21	1.497	15.00
9/22/2017	9/22/2016	9/21/2017	243	0.6109	0.6077	0.0145	2.014	0.00%	2.777	12.14	1.508	15.15
9/25/2017	9/25/2016	9/24/2017	242	0.6122	0.6090	0.0144	2.009	0.00%	2.796	11.96	1.529	15.31
9/26/2017	9/26/2016	9/25/2017	243	0.6133	0.6100	0.0144	2.009	0.00%	2.804	12.03	1.530	15.36
9/27/2017	9/27/2016	9/26/2017	243	0.6075	0.6042	0.0141	2.021	0.03%	2.669	11.49	1.518	15.47
9/28/2017	9/28/2016	9/27/2017	243	0.6097	0.6064	0.0141	2.015	0.04%	2.669	11.50	1.520	15.58
9/29/2017	9/29/2016	9/28/2017	243	0.6120	0.6088	0.0141	2.005	0.04%	2.687	11.60	1.521	15.62
10/2/2017	10/2/2016	10/1/2017	242	0.6316	0.6285	0.0136	1.967	0.01%	2.736	12.24	1.511	16.12
10/4/2017	10/4/2016	10/3/2017	243	0.6300	0.6269	0.0136	1.975	0.01%	2.729	12.20	1.511	16.12
10/5/2017	10/5/2016	10/4/2017	243	0.6260	0.6228	0.0136	1.952	-0.01%	2.722	12.12	1.511	15.96
10/6/2017	10/6/2016	10/5/2017	243	0.6218	0.6187	0.0137	1.974	-0.01%	2.736	12.12	1.505	15.74
10/9/2017	10/9/2016	10/8/2017	242	0.6219	0.6187	0.0137	1.982	-0.02%	2.766	12.16	1.504	15.66
10/10/2017	10/10/2016	10/9/2017	243	0.6212	0.6180	0.0138	1.976	-0.04%	2.760	12.12	1.509	15.71
10/11/2017	10/11/2016	10/10/2017	243	0.6200	0.6168	0.0137	1.987	-0.04%	2.730	11.95	1.511	15.77
10/12/2017	10/12/2016	10/11/2017	243	0.6197	0.6165	0.0137	1.992	-0.05%	2.775	11.94	1.509	15.76
10/13/2017	10/13/2016	10/12/2017	243	0.6208	0.6176	0.0137	1.995	-0.07%	2.798	12.01	1.501	15.77
10/16/2017	10/16/2016	10/15/2017	242	0.6171	0.6139	0.0137	1.997	-0.07%	2.760	11.71	1.511	15.75
10/17/2017	10/17/2016	10/16/2017	243	0.6171	0.6140	0.0137	1.997	-0.06%	2.759	11.73	1.509	15.79
10/18/2017	10/18/2016	10/17/2017	243	0.6172	0.6140	0.0137	1.996	-0.06%	2.761	11.72	1.511	15.80
10/19/2017	10/19/2016	10/18/2017	243	0.6167	0.6135	0.0137	2.002	-0.06%	2.764	11.66	1.511	15.82
10/20/2017	10/20/2016	10/19/2017	243	0.6173	0.6141	0.0137	1.971	-0.07%	2.767	11.67	1.513	15.84
10/23/2017	10/23/2016	10/22/2017	242	0.6234	0.6203	0.0136	2.001	-0.09%	2.829	12.03	1.491	15.84
10/24/2017	10/24/2016	10/23/2017	243	0.6229	0.6198	0.0135	1.996	-0.10%	2.830	12.05	1.491	15.85
10/25/2017	10/25/2016	10/24/2017	243	0.6219	0.6188	0.0136	1.998	-0.08%	2.808	11.89	1.499	15.92
10/26/2017	10/26/2016	10/25/2017	243	0.6223	0.6192	0.0136	2.000	-0.07%	2.789	11.88	1.499	15.95
10/27/2017	10/27/2016	10/26/2017	242	0.6227	0.6195	0.0136	2.003	-0.08%	2.799	11.90	1.497	15.90
10/30/2017	10/30/2016	10/29/2017	242	0.6227	0.6195	0.0136	2.002	-0.09%	2.783	11.82	1.503	15.96
11/1/2017	11/1/2016	10/31/2017	242	0.6226	0.6194	0.0136	1.993	-0.09%	2.778	11.78	1.505	15.98
11/2/2017	11/2/2016	11/1/2017	242	0.6177	0.6145	0.0136	2.000	-0.08%	2.742	11.58	1.491	15.88
11/3/2017	11/3/2016	11/2/2017	242	0.6136	0.6103	0.0137	1.975	-0.05%	2.703	11.29	1.499	15.88
11/6/2017	11/6/2016	11/5/2017	241	0.6138	0.6106	0.0137	1.983	-0.07%	2.718	11.27	1.498	15.85
11/7/2017	11/7/2016	11/6/2017	242	0.6132	0.6099	0.0137	1.980	-0.07%	2.716	11.28	1.494	15.86
11/8/2017	11/8/2016	11/7/2017	242	0.6045	0.6012	0.0137	1.969	-0.07%	2.641	10.81	1.487	15.76
11/9/2017	11/9/2016	11/8/2017	242	0.5926	0.5892	0.0139	1.918	-0.06%	2.651	10.67	1.456	15.29
11/10/2017	11/10/2016	11/9/2017	242	0.5866	0.5832	0.0140	1.911	-0.06%	2.612	10.50	1.470	15.13
11/13/2017	11/13/2016	11/12/2017	241	0.5809	0.5773	0.0138	1.865	-0.09%	2.614	10.58	1.446	14.76
11/14/2017	11/14/2016	11/13/2017	242	0.5802	0.5767	0.0138	1.866	-0.09%	2.615	10.61	1.443	14.76
11/15/2017	11/15/2016	11/14/2017	242	0.5756	0.5721	0.0138	1.863	-0.10%	2.634	10.69	1.473	14.49
11/16/2017	11/16/2016	11/15/2017	242	0.5767	0.5731	0.0138	1.863	-0.08%	2.596	10.56	1.482	14.63
11/17/2017	11/17/2016	11/16/2017	242	0.5733	0.5698	0.0139	1.837	-0.07%	2.615	10.61	1.474	14.45
11/20/2017	11/20/2016	11/19/2017	241	0.5777	0.5742	0.0139	1.843	-0.07%	2.638	10.68	1.482	14.55
11/21/2017	11/21/2016	11/20/2017	242	0.5777	0.5742	0.0138	1.843	-0.07%	2.636	10.69	1.482	14.58

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
11/22/2017	11/22/2016	11/21/2017	242	0.5763	0.5728	0.0139	1.840	-0.07%	2.606	10.57	1.487	14.61
11/24/2017	11/24/2016	11/23/2017	241	0.5767	0.5731	0.0139	1.840	-0.07%	2.612	10.56	1.491	14.58
11/27/2017	11/27/2016	11/26/2017	241	0.5777	0.5742	0.0139	1.849	-0.07%	2.631	10.63	1.488	14.58
11/28/2017	11/28/2016	11/27/2017	242	0.5779	0.5744	0.0139	1.845	-0.08%	2.645	10.70	1.489	14.58
11/29/2017	11/29/2016	11/28/2017	242	0.5738	0.5703	0.0139	1.836	-0.07%	2.621	10.59	1.484	14.48
11/30/2017	11/30/2016	11/29/2017	242	0.5673	0.5637	0.0140	1.799	-0.07%	2.631	10.53	1.431	14.23
12/1/2017	12/1/2016	11/30/2017	242	0.5644	0.5608	0.0141	1.788	-0.09%	2.619	10.45	1.437	14.16
12/4/2017	12/4/2016	12/3/2017	241	0.5613	0.5576	0.0141	1.804	-0.09%	2.620	10.46	1.450	13.96
12/5/2017	12/5/2016	12/4/2017	242	0.5617	0.5580	0.0141	1.810	-0.08%	2.632	10.57	1.441	13.95
12/6/2017	12/6/2016	12/5/2017	242	0.5586	0.5549	0.0141	1.763	-0.09%	2.613	10.49	1.438	13.87
12/7/2017	12/7/2016	12/6/2017	242	0.5577	0.5540	0.0137	1.847	-0.12%	2.565	10.65	1.392	13.71
12/8/2017	12/8/2016	12/7/2017	242	0.5506	0.5468	0.0137	1.847	-0.12%	2.499	10.38	1.374	13.61
12/11/2017	12/11/2016	12/10/2017	241	0.5489	0.5451	0.0137	1.822	-0.10%	2.544	10.45	1.364	13.43
12/12/2017	12/12/2016	12/11/2017	242	0.5452	0.5414	0.0137	1.844	-0.11%	2.527	10.37	1.362	13.38
12/13/2017	12/13/2016	12/12/2017	242	0.5458	0.5420	0.0137	1.852	-0.10%	2.531	10.40	1.364	13.38
12/14/2017	12/14/2016	12/13/2017	242	0.5476	0.5438	0.0137	1.838	-0.10%	2.542	10.40	1.379	13.46
12/15/2017	12/15/2016	12/14/2017	242	0.5497	0.5459	0.0136	1.791	-0.10%	2.539	10.41	1.382	13.54
12/18/2017	12/18/2016	12/17/2017	241	0.5536	0.5498	0.0134	1.799	-0.15%	2.730	11.26	1.337	12.97
12/19/2017	12/19/2016	12/18/2017	242	0.5567	0.5530	0.0134	1.792	-0.14%	2.755	11.52	1.334	12.94
12/20/2017	12/20/2016	12/19/2017	242	0.5548	0.5511	0.0133	1.774	-0.13%	2.765	11.66	1.310	12.72
12/21/2017	12/21/2016	12/20/2017	242	0.5545	0.5508	0.0133	1.770	-0.14%	2.769	11.74	1.297	12.64
12/22/2017	12/22/2016	12/21/2017	242	0.5512	0.5474	0.0133	1.758	-0.15%	2.756	11.65	1.294	12.56
12/27/2017	12/27/2016	12/26/2017	241	0.5522	0.5484	0.0133	1.745	-0.15%	2.755	11.63	1.298	12.58
12/28/2017	12/28/2016	12/27/2017	241	0.5546	0.5509	0.0133	1.743	-0.15%	2.753	11.66	1.302	12.67
1/2/2018	1/2/2017	1/1/2018	240	0.5514	0.5477	0.0133	1.740	-0.15%	2.748	11.56	1.303	12.56
1/3/2018	1/3/2017	1/2/2018	241	0.5514	0.5477	0.0133	1.744	-0.15%	2.744	11.58	1.302	12.59
1/4/2018	1/4/2017	1/3/2018	241	0.5443	0.5404	0.0133	1.742	-0.17%	2.714	11.48	1.298	12.35
1/5/2018	1/5/2017	1/4/2018	241	0.5436	0.5398	0.0133	1.752	-0.17%	2.712	11.42	1.300	12.37
1/8/2018	1/8/2017	1/7/2018	240	0.5312	0.5273	0.0137	1.733	-0.19%	2.649	10.85	1.340	12.28
1/9/2018	1/9/2017	1/8/2018	241	0.5308	0.5269	0.0137	1.764	-0.19%	2.646	10.85	1.341	12.31
1/10/2018	1/10/2017	1/9/2018	241	0.5244	0.5204	0.0138	1.733	-0.20%	2.623	10.69	1.337	12.17
1/11/2018	1/11/2017	1/10/2018	241	0.5307	0.5268	0.0137	1.709	-0.17%	2.600	10.66	1.351	12.47
1/12/2018	1/12/2017	1/11/2018	241	0.5390	0.5351	0.0136	1.664	-0.20%	2.637	10.90	1.352	12.62
1/16/2018	1/16/2017	1/15/2018	240	0.5341	0.5301	0.0135	1.640	-0.19%	2.566	10.70	1.336	12.54
1/17/2018	1/17/2017	1/16/2018	241	0.5300	0.5260	0.0135	1.626	-0.20%	2.530	10.58	1.336	12.51
1/18/2018	1/18/2017	1/17/2018	241	0.5229	0.5189	0.0135	1.633	-0.19%	2.500	10.44	1.335	12.32
1/19/2018	1/19/2017	1/18/2018	241	0.5258	0.5218	0.0134	1.645	-0.19%	2.505	10.49	1.339	12.40
1/23/2018	1/22/2017	1/21/2018	240	0.5272	0.5232	0.0134	1.654	-0.20%	2.515	10.54	1.336	12.38
1/23/2018	1/23/2017	1/22/2018	241	0.5257	0.5217	0.0135	1.639	-0.19%	2.538	10.61	1.333	12.30
1/24/2018	1/24/2017	1/23/2018	241	0.5250	0.5210	0.0135	1.658	-0.20%	2.517	10.56	1.335	12.31
1/25/2018	1/25/2017	1/24/2018	241	0.5217	0.5177	0.0135	1.643	-0.20%	2.498	10.47	1.330	12.24
1/26/2018	1/26/2017	1/25/2018	241	0.5152	0.5111	0.0133	1.650	-0.21%	2.396	10.03	1.324	12.34
1/29/2018	1/29/2017	1/28/2018	240	0.5146	0.5106	0.0134	1.652	-0.21%	2.388	9.97	1.326	12.32

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
1/30/2018	1/30/2017	1/29/2018	241	0.5131	0.5090	0.0134	1.645	-0.21%	2.392	10.00	1.320	12.28
1/31/2018	1/31/2017	1/30/2018	241	0.5144	0.5103	0.0134	1.629	-0.22%	2.432	10.16	1.319	12.20
2/1/2018	2/1/2017	1/31/2018	241	0.5137	0.5096	0.0134	1.629	-0.22%	2.425	10.13	1.321	12.20
2/2/2018	2/2/2017	2/1/2018	241	0.5121	0.5080	0.0133	1.646	-0.23%	2.405	10.14	1.305	12.13
2/5/2018	2/5/2017	2/4/2018	240	0.5049	0.5007	0.0133	1.638	-0.24%	2.368	9.93	1.298	11.96
2/6/2018	2/6/2017	2/5/2018	241	0.4999	0.4957	0.0134	1.634	-0.22%	2.239	9.78	1.301	11.93
2/7/2018	2/7/2017	2/6/2018	241	0.4946	0.4904	0.0135	1.612	-0.17%	1.813	9.42	1.320	12.01
2/8/2018	2/8/2017	2/7/2018	241	0.4671	0.4626	0.0139	1.645	-0.17%	1.632	8.66	1.307	11.56
2/9/2018	2/9/2017	2/8/2018	241	0.4679	0.4634	0.0139	1.680	-0.15%	1.611	8.81	1.307	11.47
2/12/2018	2/12/2017	2/11/2018	240	0.4727	0.4683	0.0139	1.686	-0.14%	1.575	8.95	1.318	11.51
2/13/2018	2/13/2017	2/12/2018	241	0.4783	0.4739	0.0139	1.683	-0.14%	1.611	9.35	1.312	11.44
2/14/2018	2/14/2017	2/13/2018	241	0.4728	0.4683	0.0140	1.701	-0.15%	1.603	9.24	1.306	11.31
2/15/2018	2/15/2017	2/14/2018	241	0.4699	0.4654	0.0140	1.694	-0.16%	1.599	9.28	1.300	11.17
2/16/2018	2/16/2017	2/15/2018	241	0.4636	0.4591	0.0140	1.679	-0.17%	1.553	9.03	1.301	11.14
2/20/2018	2/20/2017	2/19/2018	240	0.4624	0.4578	0.0140	1.662	-0.16%	1.530	8.98	1.294	11.10
2/21/2018	2/21/2017	2/20/2018	241	0.4449	0.4402	0.0143	1.628	-0.14%	1.494	8.60	1.287	10.80
2/22/2018	2/22/2017	2/21/2018	241	0.4515	0.4469	0.0142	1.676	-0.14%	1.483	8.59	1.308	11.05
2/23/2018	2/23/2017	2/22/2018	241	0.4520	0.4474	0.0142	1.678	-0.14%	1.485	8.61	1.308	11.05
2/26/2018	2/26/2017	2/25/2018	240	0.4500	0.4454	0.0142	1.670	-0.14%	1.476	8.53	1.309	11.01
2/27/2018	2/27/2017	2/26/2018	241	0.4499	0.4453	0.0142	1.669	-0.14%	1.456	8.50	1.311	11.07
2/28/2018	2/28/2017	2/27/2018	241	0.4515	0.4469	0.0142	1.676	-0.14%	1.452	8.49	1.312	11.13
3/1/2018	3/1/2017	2/28/2018	241	0.4533	0.4487	0.0142	1.679	-0.15%	1.460	8.59	1.309	11.11
3/2/2018	3/2/2017	3/1/2018	241	0.4395	0.4348	0.0142	1.680	-0.16%	1.414	8.40	1.290	10.77
3/5/2018	3/5/2017	3/4/2018	240	0.4483	0.4436	0.0141	1.647	-0.16%	1.428	8.62	1.299	10.88
3/6/2018	3/6/2017	3/5/2018	241	0.4510	0.4464	0.0141	1.646	-0.16%	1.438	8.77	1.299	10.89
3/7/2018	3/7/2017	3/6/2018	241	0.4572	0.4527	0.0135	1.739	-0.13%	1.413	8.99	1.254	10.94
3/8/2018	3/8/2017	3/7/2018	241	0.4527	0.4481	0.0136	1.716	-0.11%	1.409	8.91	1.250	10.84
3/9/2018	3/9/2017	3/8/2018	241	0.4519	0.4473	0.0136	1.741	-0.13%	1.411	8.94	1.244	10.79
3/12/2018	3/12/2017	3/11/2018	240	0.4476	0.4430	0.0136	1.740	-0.14%	1.384	8.79	1.238	10.71
3/13/2018	3/13/2017	3/12/2018	241	0.4477	0.4430	0.0136	1.755	-0.15%	1.380	8.80	1.238	10.74
3/14/2018	3/14/2017	3/13/2018	241	0.4486	0.4439	0.0136	1.754	-0.15%	1.384	8.82	1.241	10.76
3/15/2018	3/15/2017	3/14/2018	241	0.4470	0.4424	0.0136	1.759	-0.15%	1.381	8.81	1.235	10.72
3/16/2018	3/16/2017	3/15/2018	241	0.4465	0.4419	0.0136	1.759	-0.15%	1.377	8.77	1.237	10.73
3/19/2018	3/19/2017	3/18/2018	240	0.4452	0.4405	0.0136	1.745	-0.14%	1.394	8.83	1.230	10.59
3/20/2018	3/20/2017	3/19/2018	241	0.4480	0.4434	0.0136	1.744	-0.14%	1.399	8.99	1.228	10.60
3/21/2018	3/21/2017	3/20/2018	241	0.4484	0.4437	0.0135	1.770	-0.12%	1.389	9.00	1.219	10.60
3/22/2018	3/22/2017	3/21/2018	241	0.4264	0.4215	0.0136	1.770	-0.11%	1.327	8.53	1.189	10.20
3/23/2018	3/23/2017	3/22/2018	241	0.4307	0.4259	0.0136	1.822	-0.11%	1.341	8.69	1.188	10.22
3/26/2018	3/26/2017	3/25/2018	240	0.4364	0.4317	0.0136	1.825	-0.11%	1.354	8.91	1.187	10.20
3/27/2018	3/27/2017	3/26/2018	241	0.4354	0.4306	0.0136	1.824	-0.11%	1.357	8.95	1.181	10.17
3/28/2018	3/28/2017	3/27/2018	241	0.4363	0.4316	0.0136	1.824	-0.12%	1.341	8.97	1.182	10.19
3/29/2018	3/29/2017	3/28/2018	241	0.4305	0.4257	0.0136	1.825	-0.12%	1.302	8.84	1.173	10.09
4/3/2018	4/3/2017	4/2/2018	239	0.4350	0.4302	0.0136	1.805	-0.12%	1.311	8.91	1.175	10.11

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
4/4/2018	4/4/2017	4/3/2018	239	0.4305	0.4257	0.0136	1.811	-0.12%	1.296	8.84	1.168	10.01
4/5/2018	4/5/2017	4/4/2018	239	0.4315	0.4267	0.0136	1.814	-0.11%	1.297	8.86	1.169	10.03
4/6/2018	4/6/2017	4/5/2018	239	0.4433	0.4386	0.0136	1.810	-0.11%	1.339	9.32	1.173	10.05
4/9/2018	4/9/2017	4/8/2018	238	0.4476	0.4429	0.0136	1.819	-0.11%	1.357	9.45	1.177	10.06
4/10/2018	4/10/2017	4/9/2018	239	0.4485	0.4438	0.0136	1.822	-0.11%	1.359	9.49	1.178	10.10
4/11/2018	4/11/2017	4/10/2018	239	0.4467	0.4420	0.0136	1.817	-0.12%	1.347	9.42	1.180	10.09
4/12/2018	4/12/2017	4/11/2018	239	0.4415	0.4367	0.0137	1.825	-0.11%	1.341	9.34	1.166	9.96
4/13/2018	4/13/2017	4/12/2018	239	0.4435	0.4387	0.0137	1.830	-0.10%	1.344	9.37	1.167	10.01
4/16/2018	4/16/2017	4/15/2018	239	0.4394	0.4346	0.0137	1.826	-0.10%	1.342	9.33	1.151	9.90
4/17/2018	4/17/2017	4/16/2018	240	0.4399	0.4351	0.0137	1.834	-0.10%	1.338	9.32	1.151	9.96
4/18/2018	4/18/2017	4/17/2018	241	0.4399	0.4352	0.0137	1.833	-0.10%	1.333	9.34	1.151	9.98
4/19/2018	4/19/2017	4/18/2018	241	0.4363	0.4316	0.0137	1.829	-0.10%	1.329	9.30	1.138	9.89
4/20/2018	4/20/2017	4/19/2018	241	0.4329	0.4281	0.0137	1.842	-0.10%	1.322	9.27	1.119	9.79
4/23/2018	4/23/2017	4/22/2018	240	0.4323	0.4275	0.0137	1.812	-0.11%	1.323	9.28	1.105	9.71
4/24/2018	4/24/2017	4/23/2018	241	0.4307	0.4259	0.0137	1.823	-0.11%	1.322	9.27	1.104	9.70
4/25/2018	4/25/2017	4/24/2018	241	0.4027	0.3976	0.0134	1.765	-0.12%	1.201	8.51	1.055	9.38
4/26/2018	4/26/2017	4/25/2018	241	0.4102	0.4053	0.0134	1.752	-0.11%	1.205	8.65	1.070	9.52
4/27/2018	4/27/2017	4/26/2018	240	0.4158	0.4109	0.0133	1.753	-0.12%	1.201	8.67	1.080	9.67
4/30/2018	4/30/2017	4/29/2018	240	0.4122	0.4072	0.0134	1.735	-0.13%	1.186	8.49	1.094	9.70
5/2/2018	5/2/2017	5/1/2018	241	0.4113	0.4063	0.0134	1.742	-0.13%	1.186	8.50	1.091	9.70
5/3/2018	5/3/2017	5/2/2018	241	0.4096	0.4046	0.0134	1.750	-0.13%	1.174	8.42	1.095	9.71
5/4/2018	5/4/2017	5/3/2018	241	0.4050	0.4000	0.0135	1.735	-0.13%	1.169	8.42	1.076	9.54
5/7/2018	5/7/2017	5/6/2018	240	0.4058	0.4008	0.0135	1.745	-0.14%	1.167	8.48	1.073	9.48
5/8/2018	5/8/2017	5/7/2018	241	0.4058	0.4008	0.0134	1.748	-0.15%	1.163	8.49	1.074	9.51
5/9/2018	5/9/2017	5/8/2018	241	0.4024	0.3974	0.0135	1.741	-0.15%	1.163	8.47	1.058	9.41
5/10/2018	5/10/2017	5/9/2018	241	0.4030	0.3980	0.0135	1.740	-0.14%	1.164	8.49	1.055	9.41
5/11/2018	5/11/2017	5/10/2018	241	0.4032	0.3982	0.0135	1.739	-0.15%	1.160	8.50	1.054	9.41
5/14/2018	5/14/2017	5/13/2018	240	0.4027	0.3977	0.0135	1.734	-0.14%	1.161	8.49	1.052	9.37
5/15/2018	5/15/2017	5/14/2018	241	0.4008	0.3958	0.0135	1.732	-0.15%	1.155	8.44	1.054	9.38
5/16/2018	5/16/2017	5/15/2018	241	0.3979	0.3928	0.0135	1.721	-0.16%	1.152	8.44	1.041	9.27
5/17/2018	5/17/2017	5/16/2018	241	0.3998	0.3947	0.0135	1.711	-0.17%	1.156	8.45	1.049	9.33
5/18/2018	5/18/2017	5/17/2018	241	0.3895	0.3843	0.0135	1.720	-0.16%	1.135	8.27	1.041	9.14
5/22/2018	5/22/2017	5/21/2018	240	0.3908	0.3857	0.0136	1.725	-0.17%	1.136	8.23	1.048	9.18
5/23/2018	5/23/2017	5/22/2018	240	0.3926	0.3874	0.0136	1.726	-0.16%	1.144	8.30	1.048	9.18
5/24/2018	5/24/2017	5/23/2018	240	0.3892	0.3840	0.0136	1.718	-0.16%	1.134	8.26	1.040	9.10
5/25/2018	5/25/2017	5/24/2018	240	0.3892	0.3841	0.0138	1.727	-0.18%	1.137	8.16	1.063	9.19
5/29/2018	5/29/2017	5/28/2018	239	0.3894	0.3842	0.0138	1.769	-0.16%	1.138	8.16	1.061	9.16
5/30/2018	5/30/2017	5/29/2018	240	0.4082	0.4032	0.0138	1.766	-0.18%	1.189	8.60	1.084	9.46
5/31/2018	5/31/2017	5/30/2018	240	0.4072	0.4022	0.0138	1.783	-0.17%	1.187	8.61	1.077	9.41
6/1/2018	6/1/2017	5/31/2018	240	0.3914	0.3863	0.0143	1.738	-0.19%	1.182	8.26	1.104	9.18
6/4/2018	6/4/2017	6/3/2018	239	0.3945	0.3894	0.0144	1.841	-0.18%	1.201	8.32	1.114	9.20
6/5/2018	6/5/2017	6/4/2018	240	0.3934	0.3883	0.0144	1.834	-0.17%	1.205	8.36	1.108	9.16
6/6/2018	6/6/2017	6/5/2018	241	0.3943	0.3892	0.0143	1.837	-0.18%	1.206	8.38	1.107	9.20

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
6/7/2018	6/7/2017	6/6/2018	241	0.3965	0.3915	0.0143	1.839	-0.17%	1.207	8.41	1.107	9.26
6/8/2018	6/8/2017	6/7/2018	241	0.3959	0.3909	0.0143	1.837	-0.17%	1.211	8.44	1.104	9.21
6/11/2018	6/11/2017	6/10/2018	240	0.3941	0.3890	0.0143	1.832	-0.18%	1.210	8.42	1.108	9.12
6/12/2018	6/12/2017	6/11/2018	241	0.3952	0.3901	0.0143	1.831	-0.18%	1.214	8.48	1.108	9.14
6/13/2018	6/13/2017	6/12/2018	241	0.3948	0.3897	0.0143	1.833	-0.17%	1.205	8.42	1.111	9.18
6/14/2018	6/14/2017	6/13/2018	241	0.3942	0.3891	0.0143	1.832	-0.18%	1.203	8.40	1.107	9.18
6/15/2018	6/15/2017	6/14/2018	241	0.3903	0.3852	0.0143	1.822	-0.16%	1.206	8.41	1.102	9.04
6/18/2018	6/18/2017	6/17/2018	240	0.3956	0.3905	0.0143	1.821	-0.17%	1.216	8.47	1.124	9.13
6/19/2018	6/19/2017	6/18/2018	241	0.3953	0.3902	0.0143	1.821	-0.16%	1.215	8.48	1.122	9.15
6/20/2018	6/20/2017	6/19/2018	241	0.3922	0.3871	0.0142	1.823	-0.16%	1.189	8.31	1.125	9.19
6/21/2018	6/21/2017	6/20/2018	241	0.3917	0.3866	0.0142	1.825	-0.16%	1.186	8.29	1.125	9.19
6/22/2018	6/22/2017	6/21/2018	241	0.3940	0.3889	0.0143	1.822	-0.17%	1.195	8.35	1.129	9.22
6/25/2018	6/25/2017	6/24/2018	240	0.3946	0.3894	0.0143	1.825	-0.16%	1.200	8.37	1.128	9.18
6/26/2018	6/26/2017	6/25/2018	241	0.3985	0.3935	0.0143	1.824	-0.16%	1.206	8.55	1.126	9.20
6/27/2018	6/27/2017	6/26/2018	241	0.3984	0.3933	0.0142	1.826	-0.17%	1.204	8.54	1.126	9.20
6/28/2018	6/28/2017	6/27/2018	241	0.3888	0.3836	0.0143	1.823	-0.19%	1.204	8.51	1.100	8.88
6/29/2018	6/29/2017	6/28/2018	241	0.3869	0.3817	0.0143	1.830	-0.19%	1.192	8.46	1.100	8.86
7/2/2018	7/2/2017	7/1/2018	240	0.3934	0.3883	0.0142	1.824	-0.18%	1.201	8.59	1.133	8.94
7/3/2018	7/3/2017	7/2/2018	241	0.3906	0.3855	0.0142	1.816	-0.18%	1.192	8.58	1.124	8.88
7/5/2018	7/5/2017	7/4/2018	241	0.3815	0.3763	0.0142	1.822	-0.19%	1.184	8.55	1.098	8.59
7/6/2018	7/6/2017	7/5/2018	241	0.3794	0.3742	0.0143	1.808	-0.19%	1.187	8.52	1.098	8.54
7/9/2018	7/9/2017	7/8/2018	240	0.3767	0.3714	0.0144	1.799	-0.20%	1.209	8.67	1.068	8.25
7/10/2018	7/10/2017	7/9/2018	241	0.3744	0.3691	0.0144	1.822	-0.20%	1.207	8.67	1.057	8.20
7/11/2018	7/11/2017	7/10/2018	241	0.3743	0.3691	0.0144	1.822	-0.20%	1.207	8.67	1.057	8.20
7/12/2018	7/12/2017	7/11/2018	241	0.3759	0.3707	0.0144	1.818	-0.20%	1.213	8.73	1.055	8.19
7/13/2018	7/13/2017	7/12/2018	241	0.3762	0.3709	0.0144	1.822	-0.20%	1.229	8.82	1.048	8.11
7/16/2018	7/16/2017	7/15/2018	240	0.3745	0.3692	0.0144	1.820	-0.19%	1.234	8.83	1.042	8.00
7/17/2018	7/17/2017	7/16/2018	241	0.3808	0.3756	0.0148	1.746	-0.16%	1.221	8.51	1.131	8.60
7/18/2018	7/18/2017	7/17/2018	241	0.3750	0.3697	0.0149	1.837	-0.17%	1.220	8.45	1.113	8.44
7/19/2018	7/19/2017	7/18/2018	241	0.3727	0.3674	0.0149	1.865	-0.15%	1.221	8.46	1.106	8.36
7/20/2018	7/20/2017	7/19/2018	241	0.3727	0.3674	0.0149	1.866	-0.15%	1.223	8.46	1.104	8.35
7/23/2018	7/23/2017	7/22/2018	240	0.3710	0.3657	0.0150	1.857	-0.14%	1.221	8.42	1.102	8.29
7/24/2018	7/24/2017	7/23/2018	241	0.3714	0.3661	0.0149	1.857	-0.14%	1.217	8.42	1.093	8.35
7/25/2018	7/25/2017	7/24/2018	241	0.3716	0.3663	0.0149	1.865	-0.15%	1.224	8.51	1.081	8.27
7/26/2018	7/26/2017	7/25/2018	240	0.3668	0.3614	0.0149	1.862	-0.16%	1.217	8.44	1.079	8.13
7/27/2018	7/27/2017	7/26/2018	240	0.3696	0.3643	0.0149	1.865	-0.16%	1.224	8.50	1.083	8.16
7/30/2018	7/30/2017	7/29/2018	240	0.3692	0.3639	0.0149	1.848	-0.15%	1.223	8.48	1.085	8.17
7/31/2018	7/31/2017	7/30/2018	241	0.3705	0.3652	0.0149	1.831	-0.13%	1.201	8.33	1.110	8.41
8/1/2018	8/1/2017	7/31/2018	241	0.3701	0.3648	0.0150	1.813	-0.12%	1.205	8.35	1.107	8.38
8/2/2018	8/2/2017	8/1/2018	241	0.3683	0.3630	0.0150	1.831	-0.12%	1.203	8.33	1.105	8.33
8/3/2018	8/3/2017	8/2/2018	241	0.3709	0.3656	0.0150	1.812	-0.13%	1.214	8.38	1.112	8.37
8/6/2018	8/6/2017	8/5/2018	240	0.3689	0.3635	0.0150	1.822	-0.15%	1.216	8.41	1.106	8.24
8/7/2018	8/7/2017	8/6/2018	241	0.3686	0.3633	0.0150	1.823	-0.15%	1.216	8.42	1.105	8.25

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
8/8/2018	8/8/2017	8/7/2018	241	0.3697	0.3644	0.0150	1.823	-0.14%	1.222	8.48	1.104	8.23
8/9/2018	8/9/2017	8/8/2018	241	0.3689	0.3636	0.0150	1.825	-0.14%	1.223	8.47	1.104	8.21
8/10/2018	8/10/2017	8/9/2018	241	0.3617	0.3564	0.0150	1.843	-0.13%	1.205	8.34	1.088	8.08
8/13/2018	8/13/2017	8/12/2018	240	0.3631	0.3577	0.0150	1.839	-0.13%	1.215	8.41	1.088	8.03
8/14/2018	8/14/2017	8/13/2018	241	0.3648	0.3594	0.0150	1.839	-0.14%	1.222	8.47	1.090	8.06
8/15/2018	8/15/2017	8/14/2018	241	0.3613	0.3559	0.0150	1.844	-0.15%	1.206	8.37	1.082	8.04
8/16/2018	8/16/2017	8/15/2018	241	0.3637	0.3583	0.0150	1.844	-0.15%	1.216	8.48	1.080	8.01
8/17/2018	8/17/2017	8/16/2018	241	0.3645	0.3592	0.0150	1.841	-0.15%	1.215	8.51	1.080	8.01
8/20/2018	8/20/2017	8/19/2018	240	0.3613	0.3559	0.0150	1.840	-0.15%	1.213	8.46	1.069	7.91
8/21/2018	8/21/2017	8/20/2018	241	0.3611	0.3557	0.0150	1.839	-0.15%	1.211	8.47	1.069	7.92
8/22/2018	8/22/2017	8/21/2018	241	0.3600	0.3547	0.0149	1.845	-0.14%	1.213	8.50	1.062	7.85
8/23/2018	8/23/2017	8/22/2018	241	0.3601	0.3548	0.0149	1.843	-0.13%	1.218	8.52	1.060	7.84
8/24/2018	8/24/2017	8/23/2018	241	0.3609	0.3555	0.0150	1.846	-0.14%	1.220	8.54	1.060	7.83
8/27/2018	8/27/2017	8/26/2018	240	0.3609	0.3555	0.0150	1.845	-0.14%	1.218	8.51	1.061	7.83
8/28/2018	8/28/2017	8/27/2018	241	0.3638	0.3585	0.0150	1.845	-0.14%	1.226	8.61	1.064	7.88
8/29/2018	8/29/2017	8/28/2018	241	0.3641	0.3587	0.0150	1.835	-0.14%	1.223	8.59	1.069	7.91
8/30/2018	8/30/2017	8/29/2018	241	0.3631	0.3577	0.0149	1.846	-0.13%	1.220	8.59	1.060	7.87
8/31/2018	8/31/2017	8/30/2018	241	0.3634	0.3581	0.0149	1.852	-0.14%	1.223	8.61	1.060	7.86
9/4/2018	9/4/2017	9/3/2018	240	0.3640	0.3587	0.0150	1.853	-0.14%	1.226	8.61	1.062	7.84
9/5/2018	9/5/2017	9/4/2018	241	0.3650	0.3596	0.0149	1.850	-0.13%	1.215	8.56	1.070	7.97
9/6/2018	9/6/2017	9/5/2018	241	0.3609	0.3555	0.0149	1.845	-0.11%	1.201	8.46	1.073	7.93
9/7/2018	9/7/2017	9/6/2018	241	0.3629	0.3575	0.0149	1.852	-0.12%	1.202	8.50	1.075	7.96
9/10/2018	9/10/2017	9/9/2018	240	0.3620	0.3566	0.0149	1.842	-0.12%	1.206	8.50	1.087	7.89
9/11/2018	9/11/2017	9/10/2018	241	0.3618	0.3565	0.0149	1.842	-0.13%	1.206	8.51	1.087	7.91
9/12/2018	9/12/2017	9/11/2018	241	0.3580	0.3526	0.0149	1.853	-0.13%	1.194	8.43	1.077	7.85
9/13/2018	9/13/2017	9/12/2018	241	0.3512	0.3457	0.0148	1.859	-0.15%	1.180	8.36	1.059	7.68
9/14/2018	9/14/2017	9/13/2018	241	0.3484	0.3429	0.0149	1.862	-0.14%	1.185	8.35	1.050	7.58
9/17/2018	9/17/2017	9/16/2018	240	0.3490	0.3435	0.0149	1.875	-0.13%	1.186	8.36	1.047	7.56
9/18/2018	9/18/2017	9/17/2018	241	0.3484	0.3429	0.0149	1.872	-0.13%	1.185	8.36	1.048	7.57
9/19/2018	9/19/2017	9/18/2018	241	0.3495	0.3441	0.0149	1.875	-0.13%	1.185	8.37	1.055	7.60
9/20/2018	9/20/2017	9/19/2018	241	0.3576	0.3522	0.0149	1.874	-0.11%	1.193	8.43	1.074	7.84
9/21/2018	9/21/2017	9/20/2018	241	0.3608	0.3554	0.0149	1.862	-0.10%	1.199	8.51	1.074	7.87
9/24/2018	9/24/2017	9/23/2018	240	0.3581	0.3527	0.0149	1.865	-0.11%	1.210	8.58	1.052	7.66
9/25/2018	9/25/2017	9/24/2018	241	0.3586	0.3532	0.0148	1.870	-0.11%	1.211	8.61	1.052	7.67
9/26/2018	9/26/2017	9/25/2018	241	0.3570	0.3515	0.0148	1.870	-0.11%	1.206	8.58	1.050	7.65
9/27/2018	9/27/2017	9/26/2018	241	0.3574	0.3520	0.0148	1.866	-0.12%	1.207	8.57	1.053	7.67
9/28/2018	9/28/2017	9/27/2018	241	0.3519	0.3464	0.0148	1.870	-0.13%	1.206	8.57	1.034	7.46
10/1/2018	10/1/2017	9/30/2018	240	0.3599	0.3545	0.0148	1.883	-0.16%	1.203	8.58	1.058	7.73
10/2/2018	10/2/2017	10/1/2018	241	0.3601	0.3547	0.0148	1.883	-0.16%	1.201	8.57	1.061	7.77
10/4/2018	10/4/2017	10/3/2018	241	0.3621	0.3567	0.0148	1.888	-0.16%	1.204	8.62	1.063	7.80
10/5/2018	10/5/2017	10/4/2018	241	0.3666	0.3613	0.0147	1.868	-0.14%	1.184	8.52	1.060	8.07
10/8/2018	10/8/2017	10/7/2018	240	0.3685	0.3632	0.0147	1.871	-0.15%	1.181	8.54	1.058	8.09
10/9/2018	10/9/2017	10/8/2018	241	0.3700	0.3647	0.0146	1.871	-0.16%	1.185	8.61	1.059	8.10

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
10/10/2018	10/10/2017	10/9/2018	241	0.3706	0.3653	0.0146	1.880	-0.14%	1.188	8.66	1.052	8.07
10/11/2018	10/11/2017	10/10/2018	241	0.3706	0.3654	0.0146	1.880	-0.13%	1.169	8.60	1.053	8.14
10/12/2018	10/12/2017	10/11/2018	241	0.3650	0.3596	0.0147	1.869	-0.13%	1.126	8.48	1.047	8.05
10/15/2018	10/15/2017	10/14/2018	240	0.3649	0.3595	0.0147	1.874	-0.12%	1.129	8.49	1.045	8.00
10/16/2018	10/16/2017	10/15/2018	241	0.3634	0.3581	0.0147	1.869	-0.11%	1.130	8.50	1.041	7.97
10/17/2018	10/17/2017	10/16/2018	241	0.3621	0.3568	0.0147	1.864	-0.12%	1.132	8.53	1.032	7.90
10/18/2018	10/18/2017	10/17/2018	241	0.3636	0.3582	0.0147	1.862	-0.11%	1.133	8.54	1.036	7.94
10/19/2018	10/19/2017	10/18/2018	241	0.3642	0.3588	0.0147	1.865	-0.12%	1.137	8.57	1.036	7.93
10/22/2018	10/22/2017	10/21/2018	240	0.3616	0.3562	0.0148	1.864	-0.13%	1.136	8.55	1.036	7.82
10/23/2018	10/23/2017	10/22/2018	241	0.3620	0.3567	0.0147	1.865	-0.13%	1.137	8.59	1.034	7.83
10/24/2018	10/24/2017	10/23/2018	241	0.3599	0.3545	0.0147	1.843	-0.12%	1.120	8.55	1.029	7.79
10/25/2018	10/25/2017	10/24/2018	240	0.3577	0.3523	0.0147	1.847	-0.13%	1.121	8.58	1.011	7.64
10/26/2018	10/26/2017	10/25/2018	240	0.3547	0.3493	0.0147	1.860	-0.13%	1.120	8.56	0.992	7.55
10/29/2018	10/29/2017	10/28/2018	240	0.3591	0.3537	0.0148	1.855	-0.13%	1.143	8.76	0.987	7.49
10/30/2018	10/30/2017	10/29/2018	241	0.3563	0.3509	0.0148	1.847	-0.13%	1.144	8.77	0.960	7.40
10/31/2018	10/31/2017	10/30/2018	241	0.3551	0.3497	0.0148	1.842	-0.12%	1.145	8.78	0.950	7.34
11/1/2018	11/1/2017	10/31/2018	242	0.3541	0.3487	0.0148	1.844	-0.13%	1.131	8.81	0.946	7.32
11/2/2018	11/2/2017	11/1/2018	242	0.3565	0.3511	0.0148	1.863	-0.12%	1.139	8.83	0.961	7.38
11/5/2018	11/5/2017	11/4/2018	241	0.3512	0.3457	0.0149	1.841	-0.12%	1.137	8.78	0.944	7.19
11/6/2018	11/6/2017	11/5/2018	242	0.3504	0.3449	0.0149	1.866	-0.12%	1.136	8.79	0.941	7.18
11/7/2018	11/7/2017	11/6/2018	242	0.3506	0.3451	0.0149	1.864	-0.13%	1.130	8.75	0.949	7.24
11/8/2018	11/8/2017	11/7/2018	242	0.3521	0.3467	0.0149	1.859	-0.13%	1.128	8.79	0.949	7.25
11/9/2018	11/9/2017	11/8/2018	242	0.3564	0.3510	0.0148	1.885	-0.14%	1.124	8.82	0.965	7.39
11/12/2018	11/12/2017	11/11/2018	241	0.3613	0.3559	0.0147	1.918	-0.16%	1.142	9.06	0.943	7.25
11/13/2018	11/13/2017	11/12/2018	242	0.3679	0.3626	0.0147	1.917	-0.17%	1.157	9.26	0.947	7.31
11/14/2018	11/14/2017	11/13/2018	242	0.3701	0.3648	0.0147	1.918	-0.16%	1.158	9.27	0.955	7.38
11/15/2018	11/15/2017	11/14/2018	242	0.3718	0.3666	0.0146	1.923	-0.17%	1.158	9.30	0.958	7.41
11/16/2018	11/16/2017	11/15/2018	242	0.3698	0.3645	0.0146	1.924	-0.18%	1.167	9.37	0.943	7.24
11/19/2018	11/19/2017	11/18/2018	241	0.3726	0.3674	0.0146	1.943	-0.19%	1.155	9.34	0.956	7.36
11/20/2018	11/20/2017	11/19/2018	242	0.3725	0.3673	0.0145	1.943	-0.19%	1.153	9.35	0.954	7.38
11/21/2018	11/21/2017	11/20/2018	242	0.3794	0.3742	0.0146	1.927	-0.21%	1.184	9.62	0.953	7.32
11/23/2018	11/23/2017	11/22/2018	241	0.3832	0.3781	0.0147	1.955	-0.19%	1.197	9.70	0.956	7.33
11/26/2018	11/26/2017	11/25/2018	241	0.3851	0.3799	0.0147	1.951	-0.19%	1.201	9.75	0.957	7.35
11/27/2018	11/27/2017	11/26/2018	242	0.3932	0.3881	0.0147	1.936	-0.18%	1.222	9.88	0.986	7.57
11/28/2018	11/28/2017	11/27/2018	242	0.3921	0.3870	0.0147	1.939	-0.16%	1.220	9.87	0.981	7.54
11/29/2018	11/29/2017	11/28/2018	242	0.3920	0.3869	0.0147	1.947	-0.17%	1.216	9.84	0.986	7.57
11/30/2018	11/30/2017	11/29/2018	242	0.3798	0.3746	0.0149	1.911	-0.20%	1.166	9.37	1.049	7.65
12/3/2018	12/3/2017	12/2/2018	241	0.3810	0.3758	0.0150	1.897	-0.20%	1.172	9.37	1.057	7.66
12/4/2018	12/4/2017	12/3/2018	242	0.3850	0.3799	0.0150	1.918	-0.20%	1.189	9.57	1.052	7.62
12/6/2018	12/6/2017	12/5/2018	241	0.3865	0.3814	0.0150	1.928	-0.21%	1.189	9.55	1.061	7.66
12/7/2018	12/7/2017	12/6/2018	241	0.3958	0.3907	0.0151	1.917	-0.20%	1.162	9.90	1.054	7.60
12/10/2018	12/10/2017	12/9/2018	240	0.3985	0.3935	0.0149	1.929	-0.23%	1.148	9.90	1.054	7.69
12/11/2018	12/11/2017	12/10/2018	241	0.4124	0.4074	0.0150	1.925	-0.24%	1.184	10.32	1.066	7.78

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
12/12/2018	12/12/2017	12/11/2018	241	0.4164	0.4115	0.0149	1.940	-0.23%	1.192	10.45	1.066	7.79
12/13/2018	12/13/2017	12/12/2018	241	0.4059	0.4009	0.0154	1.873	-0.21%	1.224	10.48	1.020	7.27
12/14/2018	12/14/2017	12/13/2018	241	0.4056	0.4006	0.0154	1.913	-0.21%	1.221	10.46	1.022	7.28
12/17/2018	12/17/2017	12/16/2018	240	0.4061	0.4011	0.0154	1.915	-0.21%	1.209	10.40	1.026	7.35
12/18/2018	12/18/2017	12/17/2018	241	0.4064	0.4014	0.0154	1.913	-0.21%	1.215	10.45	1.023	7.32
12/19/2018	12/19/2017	12/18/2018	241	0.4046	0.3996	0.0153	1.913	-0.22%	1.192	10.32	1.026	7.43
12/20/2018	12/20/2017	12/19/2018	241	0.4038	0.3987	0.0153	1.916	-0.22%	1.188	10.29	1.029	7.44
12/21/2018	12/21/2017	12/20/2018	241	0.4143	0.4094	0.0155	1.880	-0.23%	1.241	10.79	1.010	7.21
12/27/2018	12/27/2017	12/26/2018	240	0.4159	0.4110	0.0155	1.922	-0.22%	1.238	10.76	1.019	7.28
1/2/2019	1/2/2018	1/1/2019	239	0.4213	0.4164	0.0156	1.925	-0.22%	1.256	10.91	1.022	7.26
1/3/2019	1/3/2018	1/2/2019	239	0.4356	0.4308	0.0157	1.941	-0.20%	1.296	11.31	1.041	7.36
1/4/2019	1/4/2018	1/3/2019	239	0.4361	0.4314	0.0157	1.945	-0.20%	1.299	11.33	1.040	7.36
1/7/2019	1/7/2018	1/6/2019	238	0.4504	0.4458	0.0155	1.926	-0.17%	1.330	11.80	1.018	7.30
1/8/2019	1/8/2018	1/7/2019	239	0.4517	0.4471	0.0154	1.930	-0.17%	1.329	11.88	1.014	7.30
1/9/2019	1/9/2018	1/8/2019	239	0.4500	0.4454	0.0155	1.923	-0.16%	1.331	11.88	1.000	7.21
1/10/2019	1/10/2018	1/9/2019	239	0.4439	0.4392	0.0156	1.914	-0.17%	1.305	11.60	1.024	7.33
1/11/2019	1/11/2018	1/10/2019	239	0.4416	0.4368	0.0156	1.943	-0.18%	1.308	11.65	1.003	7.13
1/14/2019	1/14/2018	1/13/2019	238	0.4440	0.4393	0.0155	1.956	-0.17%	1.315	11.71	1.002	7.12
1/15/2019	1/15/2018	1/14/2019	239	0.4435	0.4387	0.0155	1.955	-0.17%	1.315	11.72	0.994	7.12
1/16/2019	1/16/2018	1/15/2019	240	0.4436	0.4389	0.0155	1.956	-0.17%	1.314	11.75	0.994	7.13
1/17/2019	1/17/2018	1/16/2019	240	0.4645	0.4600	0.0157	1.924	-0.13%	1.345	11.83	1.104	8.10
1/18/2019	1/18/2018	1/17/2019	240	0.4630	0.4585	0.0159	1.983	-0.14%	1.343	11.72	1.123	8.19
1/22/2019	1/22/2018	1/21/2019	239	0.4669	0.4624	0.0159	1.999	-0.15%	1.348	11.82	1.129	8.19
1/23/2019	1/23/2018	1/22/2019	239	0.4693	0.4648	0.0158	2.010	-0.16%	1.344	11.86	1.132	8.25
1/24/2019	1/24/2018	1/23/2019	239	0.4666	0.4621	0.0159	2.005	-0.15%	1.341	11.77	1.133	8.23
1/25/2019	1/25/2018	1/24/2019	239	0.4644	0.4599	0.0159	2.017	-0.16%	1.337	11.71	1.135	8.22
1/28/2019	1/28/2018	1/27/2019	238	0.4676	0.4630	0.0160	2.034	-0.14%	1.354	11.81	1.138	8.18
1/29/2019	1/29/2018	1/28/2019	239	0.4677	0.4632	0.0160	2.048	-0.14%	1.352	11.84	1.136	8.20
1/30/2019	1/30/2018	1/29/2019	239	0.4696	0.4651	0.0160	2.051	-0.13%	1.353	11.86	1.144	8.26
1/31/2019	1/31/2018	1/30/2019	239	0.4684	0.4639	0.0158	2.065	-0.12%	1.335	11.78	1.142	8.31
2/1/2019	2/1/2018	1/31/2019	239	0.4729	0.4684	0.0159	2.055	-0.15%	1.297	11.48	1.181	8.94
2/4/2019	2/4/2018	2/3/2019	238	0.4730	0.4685	0.0159	2.052	-0.15%	1.298	11.45	1.182	8.93
2/5/2019	2/5/2018	2/4/2019	239	0.4731	0.4686	0.0159	2.056	-0.15%	1.298	11.48	1.182	8.95
2/6/2019	2/6/2018	2/5/2019	239	0.4729	0.4685	0.0159	2.056	-0.15%	1.308	11.51	1.176	8.91
2/7/2019	2/7/2018	2/6/2019	239	0.4694	0.4649	0.0159	2.001	-0.15%	1.342	11.37	1.177	8.92
2/8/2019	2/8/2018	2/7/2019	239	0.4928	0.4885	0.0158	2.031	-0.16%	1.417	11.95	1.221	9.29
2/11/2019	2/11/2018	2/10/2019	238	0.4901	0.4858	0.0158	2.030	-0.17%	1.437	11.83	1.223	9.27
2/12/2019	2/12/2018	2/11/2019	239	0.4908	0.4865	0.0158	2.036	-0.16%	1.443	11.89	1.224	9.27
2/13/2019	2/13/2018	2/12/2019	239	0.4882	0.4838	0.0158	2.022	-0.16%	1.431	11.76	1.227	9.32
2/14/2019	2/14/2018	2/13/2019	239	0.4913	0.4870	0.0157	2.036	-0.16%	1.432	11.82	1.233	9.40
2/15/2019	2/15/2018	2/14/2019	239	0.4943	0.4900	0.0157	2.040	-0.16%	1.439	11.84	1.244	9.51
2/19/2019	2/19/2018	2/18/2019	238	0.5048	0.5006	0.0157	2.007	-0.13%	1.478	12.08	1.257	9.67
2/20/2019	2/20/2018	2/19/2019	239	0.5056	0.5014	0.0157	2.011	-0.14%	1.470	12.05	1.262	9.80

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
2/21/2019	2/21/2018	2/20/2019	239	0.5192	0.5151	0.0154	2.059	-0.16%	1.484	12.40	1.268	10.05
2/22/2019	2/22/2018	2/21/2019	239	0.5179	0.5138	0.0154	2.057	-0.17%	1.484	12.40	1.264	9.99
2/25/2019	2/25/2018	2/24/2019	238	0.5175	0.5134	0.0155	2.060	-0.16%	1.480	12.35	1.263	9.97
2/26/2019	2/26/2018	2/25/2019	239	0.5188	0.5147	0.0154	2.061	-0.16%	1.483	12.41	1.264	10.02
2/27/2019	2/27/2018	2/26/2019	239	0.5175	0.5134	0.0154	2.057	-0.15%	1.491	12.41	1.260	9.96
2/28/2019	2/28/2018	2/27/2019	239	0.5161	0.5120	0.0155	2.043	-0.14%	1.486	12.34	1.268	9.97
3/1/2019	3/1/2018	2/28/2019	239	0.5118	0.5077	0.0156	2.022	-0.13%	1.485	12.23	1.264	9.89
3/4/2019	3/4/2018	3/3/2019	238	0.5072	0.5030	0.0156	2.033	-0.13%	1.478	12.03	1.269	9.86
3/5/2019	3/5/2018	3/4/2019	239	0.5073	0.5031	0.0156	2.033	-0.13%	1.478	12.05	1.269	9.88
3/6/2019	3/6/2018	3/5/2019	239	0.5054	0.5012	0.0156	2.033	-0.13%	1.474	11.97	1.269	9.90
3/7/2019	3/7/2018	3/6/2019	239	0.5051	0.5009	0.0156	2.018	-0.12%	1.469	11.92	1.274	9.94
3/8/2019	3/8/2018	3/7/2019	239	0.5120	0.5079	0.0156	2.027	-0.15%	1.488	12.09	1.290	10.08
3/11/2019	3/11/2018	3/10/2019	238	0.5187	0.5146	0.0155	2.043	-0.14%	1.500	12.22	1.302	10.19
3/12/2019	3/12/2018	3/11/2019	239	0.5214	0.5173	0.0156	2.030	-0.12%	1.525	12.40	1.305	10.16
3/13/2019	3/13/2018	3/12/2019	239	0.5192	0.5151	0.0157	2.057	-0.13%	1.512	12.25	1.319	10.24
3/14/2019	3/14/2018	3/13/2019	239	0.5201	0.5160	0.0157	2.063	-0.13%	1.512	12.28	1.318	10.25
3/15/2019	3/15/2018	3/14/2019	239	0.5182	0.5141	0.0157	2.060	-0.13%	1.512	12.24	1.313	10.20
3/18/2019	3/18/2018	3/17/2019	238	0.5170	0.5129	0.0158	2.055	-0.14%	1.505	12.16	1.318	10.18
3/19/2019	3/19/2018	3/18/2019	239	0.5192	0.5151	0.0158	2.055	-0.13%	1.508	12.15	1.339	10.36
3/20/2019	3/20/2018	3/19/2019	239	0.5156	0.5115	0.0158	2.073	-0.13%	1.496	11.98	1.345	10.38
3/21/2019	3/21/2018	3/20/2019	239	0.5186	0.5145	0.0159	2.024	-0.15%	1.506	12.08	1.348	10.40
3/22/2019	3/22/2018	3/21/2019	239	0.5350	0.5310	0.0155	2.063	-0.14%	1.497	12.27	1.345	10.99
3/25/2019	3/25/2018	3/24/2019	238	0.5262	0.5222	0.0156	2.055	-0.14%	1.488	12.01	1.319	10.80
3/26/2019	3/26/2018	3/25/2019	239	0.5263	0.5223	0.0156	2.066	-0.14%	1.487	12.04	1.319	10.83
3/27/2019	3/27/2018	3/26/2019	239	0.5273	0.5233	0.0156	2.070	-0.14%	1.486	12.06	1.322	10.85
3/28/2019	3/28/2018	3/27/2019	239	0.5275	0.5235	0.0156	2.050	-0.12%	1.488	11.95	1.335	10.99
3/29/2019	3/29/2018	3/28/2019	239	0.5255	0.5215	0.0157	2.067	-0.13%	1.505	11.91	1.337	10.93
4/1/2019	4/1/2018	3/31/2019	239	0.5237	0.5197	0.0157	2.062	-0.14%	1.500	11.86	1.335	10.90
4/2/2019	4/2/2018	4/1/2019	240	0.5292	0.5252	0.0157	2.066	-0.13%	1.514	12.04	1.336	11.02
4/3/2019	4/3/2018	4/2/2019	241	0.5291	0.5252	0.0157	2.066	-0.13%	1.515	12.07	1.332	11.04
4/4/2019	4/4/2018	4/3/2019	241	0.5291	0.5252	0.0157	2.067	-0.13%	1.514	12.06	1.334	11.05
4/5/2019	4/5/2018	4/4/2019	241	0.5271	0.5232	0.0157	2.063	-0.13%	1.515	12.04	1.324	10.97
4/8/2019	4/8/2018	4/7/2019	240	0.5181	0.5141	0.0157	2.064	-0.14%	1.485	11.61	1.322	10.95
4/9/2019	4/9/2018	4/8/2019	241	0.5162	0.5121	0.0157	2.054	-0.15%	1.485	11.60	1.320	10.93
4/10/2019	4/10/2018	4/9/2019	241	0.5157	0.5116	0.0157	2.055	-0.15%	1.484	11.59	1.320	10.91
4/11/2019	4/11/2018	4/10/2019	241	0.5178	0.5137	0.0157	2.041	-0.15%	1.492	11.65	1.321	10.95
4/12/2019	4/12/2018	4/11/2019	241	0.5215	0.5174	0.0157	2.038	-0.14%	1.493	11.66	1.340	11.11
4/15/2019	4/15/2018	4/14/2019	240	0.5238	0.5198	0.0157	2.051	-0.14%	1.495	11.67	1.333	11.15
4/16/2019	4/16/2018	4/15/2019	241	0.5234	0.5194	0.0157	2.058	-0.14%	1.496	11.70	1.331	11.16
4/17/2019	4/17/2018	4/16/2019	241	0.5234	0.5194	0.0157	2.053	-0.13%	1.501	11.72	1.333	11.13
4/18/2019	4/18/2018	4/17/2019	241	0.5220	0.5179	0.0157	2.054	-0.12%	1.504	11.70	1.317	11.09
4/23/2019	4/23/2018	4/22/2019	239	0.5261	0.5221	0.0157	2.037	-0.12%	1.507	11.70	1.348	11.19
4/24/2019	4/24/2018	4/23/2019	239	0.5276	0.5236	0.0157	2.034	-0.14%	1.496	11.64	1.354	11.32

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
4/25/2019	4/25/2018	4/24/2019	239	0.5303	0.5264	0.0156	2.068	-0.16%	1.501	11.80	1.338	11.28
4/26/2019	4/26/2018	4/25/2019	239	0.5290	0.5250	0.0156	2.039	-0.17%	1.507	11.77	1.335	11.25
4/29/2019	4/29/2018	4/28/2019	238	0.5326	0.5286	0.0155	2.067	-0.15%	1.517	11.91	1.325	11.22
4/30/2019	4/30/2018	4/29/2019	239	0.5299	0.5259	0.0155	2.058	-0.15%	1.518	11.91	1.306	11.14
5/2/2019	5/2/2018	5/1/2019	239	0.5301	0.5261	0.0155	2.057	-0.15%	1.518	11.91	1.305	11.15
5/3/2019	5/3/2018	5/2/2019	239	0.5323	0.5284	0.0155	2.066	-0.15%	1.518	11.95	1.309	11.22
5/6/2019	5/6/2018	5/5/2019	238	0.5327	0.5287	0.0154	2.080	-0.16%	1.519	11.84	1.324	11.30
5/7/2019	5/7/2018	5/6/2019	239	0.5340	0.5300	0.0154	2.088	-0.16%	1.522	11.91	1.324	11.34
5/8/2019	5/8/2018	5/7/2019	239	0.5363	0.5323	0.0154	2.083	-0.16%	1.532	12.02	1.324	11.34
5/9/2019	5/9/2018	5/8/2019	239	0.5392	0.5353	0.0154	2.093	-0.16%	1.531	12.05	1.341	11.45
5/10/2019	5/10/2018	5/9/2019	239	0.5418	0.5379	0.0154	2.097	-0.16%	1.533	12.14	1.347	11.47
5/13/2019	5/13/2018	5/12/2019	238	0.5416	0.5377	0.0154	2.090	-0.15%	1.538	12.10	1.348	11.45
5/14/2019	5/14/2018	5/13/2019	239	0.5421	0.5383	0.0154	2.088	-0.15%	1.541	12.17	1.343	11.46
5/15/2019	5/15/2018	5/14/2019	239	0.5446	0.5408	0.0153	2.102	-0.14%	1.547	12.27	1.341	11.47
5/16/2019	5/16/2018	5/15/2019	239	0.5454	0.5416	0.0153	2.110	-0.15%	1.544	12.25	1.345	11.54
5/17/2019	5/17/2018	5/16/2019	239	0.5455	0.5416	0.0153	2.111	-0.14%	1.539	12.28	1.340	11.51
5/20/2019	5/20/2018	5/19/2019	238	0.5450	0.5411	0.0153	2.112	-0.14%	1.538	12.24	1.341	11.47
5/21/2019	5/21/2018	5/20/2019	239	0.5445	0.5407	0.0153	2.107	-0.14%	1.546	12.32	1.336	11.42
5/22/2019	5/22/2018	5/21/2019	240	0.5450	0.5412	0.0153	2.115	-0.14%	1.547	12.37	1.336	11.44
5/23/2019	5/23/2018	5/22/2019	240	0.5447	0.5408	0.0153	2.104	-0.15%	1.546	12.34	1.340	11.46
5/24/2019	5/24/2018	5/23/2019	240	0.5496	0.5458	0.0152	2.063	-0.15%	1.558	12.49	1.347	11.54
5/28/2019	5/28/2018	5/27/2019	239	0.5493	0.5455	0.0151	2.078	-0.14%	1.552	12.52	1.329	11.44
5/29/2019	5/29/2018	5/28/2019	240	0.5492	0.5454	0.0151	2.080	-0.15%	1.552	12.54	1.330	11.47
5/30/2019	5/30/2018	5/29/2019	240	0.5410	0.5371	0.0151	2.083	-0.13%	1.518	12.33	1.320	11.28
5/31/2019	5/31/2018	5/30/2019	240	0.5411	0.5372	0.0151	2.012	-0.13%	1.520	12.34	1.321	11.28
6/3/2019	6/3/2018	6/2/2019	239	0.5508	0.5470	0.0146	2.062	-0.11%	1.518	12.74	1.282	11.28
6/4/2019	6/4/2018	6/3/2019	240	0.5493	0.5455	0.0146	2.058	-0.12%	1.518	12.73	1.281	11.26
6/5/2019	6/5/2018	6/4/2019	240	0.5575	0.5538	0.0146	2.071	-0.11%	1.536	12.91	1.293	11.48
6/6/2019	6/6/2018	6/5/2019	240	0.5559	0.5522	0.0147	2.068	-0.11%	1.518	12.77	1.304	11.56
6/7/2019	6/7/2018	6/6/2019	240	0.5524	0.5486	0.0148	2.041	-0.13%	1.502	12.56	1.322	11.61
6/11/2019	6/11/2018	6/10/2019	239	0.5526	0.5488	0.0148	2.060	-0.14%	1.488	12.48	1.321	11.66
6/12/2019	6/12/2018	6/11/2019	239	0.5554	0.5516	0.0148	2.050	-0.13%	1.499	12.53	1.330	11.74
6/13/2019	6/13/2018	6/12/2019	239	0.5552	0.5514	0.0148	2.051	-0.13%	1.500	12.54	1.326	11.72
6/14/2019	6/14/2018	6/13/2019	239	0.5553	0.5515	0.0148	2.053	-0.13%	1.500	12.54	1.330	11.72
6/17/2019	6/17/2018	6/16/2019	238	0.5560	0.5522	0.0148	2.055	-0.13%	1.500	12.51	1.336	11.73
6/18/2019	6/18/2018	6/17/2019	239	0.5564	0.5526	0.0148	2.056	-0.13%	1.501	12.54	1.337	11.78
6/19/2019	6/19/2018	6/18/2019	239	0.5568	0.5530	0.0149	2.032	-0.12%	1.516	12.64	1.338	11.70
6/20/2019	6/20/2018	6/19/2019	239	0.5585	0.5548	0.0149	2.024	-0.12%	1.527	12.71	1.339	11.71
6/21/2019	6/21/2018	6/20/2019	239	0.5609	0.5571	0.0149	2.030	-0.14%	1.505	12.55	1.344	12.00
6/24/2019	6/24/2018	6/23/2019	238	0.5593	0.5555	0.0149	2.029	-0.13%	1.499	12.47	1.338	11.95
6/25/2019	6/25/2018	6/24/2019	239	0.5598	0.5561	0.0149	2.030	-0.14%	1.499	12.49	1.337	12.01
6/26/2019	6/26/2018	6/25/2019	239	0.5580	0.5543	0.0149	2.028	-0.13%	1.497	12.38	1.341	12.02
6/27/2019	6/27/2018	6/26/2019	239	0.5575	0.5537	0.0150	1.995	-0.11%	1.485	12.21	1.361	12.18

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
6/28/2019	6/28/2018	6/27/2019	239	0.5618	0.5581	0.0149	2.011	-0.10%	1.487	12.29	1.368	12.31
7/1/2019	7/1/2018	6/30/2019	238	0.5645	0.5608	0.0149	2.000	-0.09%	1.500	12.30	1.372	12.38
7/2/2019	7/2/2018	7/1/2019	239	0.5616	0.5579	0.0150	1.999	-0.10%	1.492	12.24	1.370	12.35
7/3/2019	7/3/2018	7/2/2019	239	0.5652	0.5615	0.0149	2.023	-0.10%	1.500	12.30	1.379	12.47
7/5/2019	7/5/2018	7/4/2019	239	0.5625	0.5588	0.0150	2.000	-0.10%	1.508	12.30	1.372	12.34
7/8/2019	7/8/2018	7/7/2019	238	0.5674	0.5637	0.0149	1.988	-0.10%	1.487	12.15	1.400	12.68
7/9/2019	7/9/2018	7/8/2019	239	0.5576	0.5538	0.0152	2.003	-0.12%	1.495	11.97	1.400	12.42
7/10/2019	7/10/2018	7/9/2019	239	0.5550	0.5513	0.0154	1.961	-0.13%	1.503	11.90	1.411	12.36
7/11/2019	7/11/2018	7/10/2019	239	0.5545	0.5508	0.0154	2.000	-0.13%	1.504	11.91	1.406	12.33
7/12/2019	7/12/2018	7/11/2019	239	0.5543	0.5505	0.0154	2.000	-0.12%	1.503	11.88	1.408	12.34
7/15/2019	7/15/2018	7/14/2019	238	0.5542	0.5504	0.0154	1.969	-0.11%	1.507	11.84	1.416	12.33
7/16/2019	7/16/2018	7/15/2019	239	0.5522	0.5484	0.0155	1.954	-0.10%	1.509	11.83	1.413	12.29
7/17/2019	7/17/2018	7/16/2019	239	0.5434	0.5395	0.0154	1.881	-0.12%	1.513	11.92	1.365	11.78
7/18/2019	7/18/2018	7/17/2019	239	0.5479	0.5441	0.0153	1.931	-0.12%	1.518	12.01	1.379	11.91
7/19/2019	7/19/2018	7/18/2019	239	0.5481	0.5442	0.0153	1.943	-0.12%	1.513	12.00	1.377	11.93
7/22/2019	7/22/2018	7/21/2019	238	0.5487	0.5449	0.0153	1.938	-0.13%	1.507	11.94	1.384	11.97
7/23/2019	7/23/2018	7/22/2019	239	0.5484	0.5446	0.0153	1.943	-0.12%	1.505	11.94	1.385	12.00
7/24/2019	7/24/2018	7/23/2019	239	0.5523	0.5485	0.0153	1.945	-0.12%	1.513	12.02	1.400	12.11
7/25/2019	7/25/2018	7/24/2019	238	0.5524	0.5486	0.0153	1.942	-0.12%	1.513	11.98	1.402	12.10
7/26/2019	7/26/2018	7/25/2019	239	0.5497	0.5459	0.0154	1.932	-0.11%	1.512	11.95	1.399	12.06
7/29/2019	7/29/2018	7/28/2019	238	0.5488	0.5449	0.0154	1.942	-0.12%	1.507	11.89	1.397	12.02
7/30/2019	7/30/2018	7/29/2019	239	0.5485	0.5447	0.0153	1.942	-0.12%	1.507	11.91	1.396	12.04
7/31/2019	7/31/2018	7/30/2019	239	0.5499	0.5461	0.0153	1.953	-0.15%	1.528	12.10	1.384	11.91
8/1/2019	8/1/2018	7/31/2019	239	0.5530	0.5492	0.0152	1.958	-0.15%	1.526	12.13	1.392	12.03
8/2/2019	8/2/2018	8/1/2019	239	0.5533	0.5495	0.0152	1.960	-0.14%	1.524	12.13	1.394	12.05
8/5/2019	8/5/2018	8/4/2019	238	0.5391	0.5352	0.0155	1.937	-0.12%	1.474	11.79	1.363	11.65
8/6/2019	8/6/2018	8/5/2019	239	0.5383	0.5344	0.0154	1.942	-0.11%	1.463	11.82	1.361	11.64
8/7/2019	8/7/2018	8/6/2019	239	0.5386	0.5347	0.0155	1.950	-0.12%	1.468	11.86	1.361	11.61
8/8/2019	8/8/2018	8/7/2019	239	0.5390	0.5351	0.0155	1.945	-0.13%	1.460	11.78	1.362	11.71
8/9/2019	8/9/2018	8/8/2019	239	0.5473	0.5434	0.0155	1.943	-0.12%	1.482	12.10	1.368	11.78
8/12/2019	8/12/2018	8/11/2019	238	0.5477	0.5439	0.0154	1.948	-0.12%	1.473	12.01	1.373	11.85
8/13/2019	8/13/2018	8/12/2019	239	0.5464	0.5426	0.0156	1.909	-0.14%	1.483	11.96	1.390	11.89
8/14/2019	8/14/2018	8/13/2019	239	0.5462	0.5423	0.0156	1.927	-0.13%	1.482	11.95	1.386	11.88
8/15/2019	8/15/2018	8/14/2019	239	0.5551	0.5514	0.0156	1.926	-0.14%	1.509	12.29	1.383	11.97
8/16/2019	8/16/2018	8/15/2019	239	0.5524	0.5486	0.0157	1.924	-0.14%	1.511	12.23	1.378	11.90
8/19/2019	8/19/2018	8/18/2019	238	0.5565	0.5528	0.0157	1.941	-0.12%	1.536	12.38	1.385	11.90
8/20/2019	8/20/2018	8/19/2019	239	0.5580	0.5542	0.0157	1.937	-0.12%	1.543	12.51	1.383	11.89
8/21/2019	8/21/2018	8/20/2019	239	0.5577	0.5539	0.0157	1.935	-0.11%	1.544	12.51	1.380	11.87
8/22/2019	8/22/2018	8/21/2019	239	0.5566	0.5528	0.0157	1.932	-0.12%	1.542	12.49	1.378	11.85
8/23/2019	8/23/2018	8/22/2019	239	0.5578	0.5540	0.0157	1.928	-0.11%	1.536	12.44	1.387	11.95
8/26/2019	8/26/2018	8/25/2019	238	0.5585	0.5547	0.0158	1.930	-0.10%	1.541	12.46	1.385	11.92
8/27/2019	8/27/2018	8/26/2019	239	0.5585	0.5547	0.0157	1.930	-0.10%	1.540	12.49	1.385	11.94
8/28/2019	8/28/2018	8/27/2019	239	0.5536	0.5499	0.0158	1.920	-0.10%	1.538	12.39	1.373	11.80

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
8/29/2019	8/29/2018	8/28/2019	239	0.5537	0.5499	0.0158	1.929	-0.09%	1.540	12.42	1.368	11.77
8/30/2019	8/30/2018	8/29/2019	239	0.5541	0.5503	0.0158	1.925	-0.09%	1.538	12.44	1.366	11.77
9/3/2019	9/3/2018	9/2/2019	238	0.5536	0.5498	0.0158	1.926	-0.09%	1.535	12.38	1.368	11.75
9/4/2019	9/4/2018	9/3/2019	239	0.5480	0.5441	0.0159	1.917	-0.08%	1.532	12.31	1.352	11.60
9/5/2019	9/5/2018	9/4/2019	239	0.5485	0.5446	0.0159	1.935	-0.09%	1.541	12.41	1.348	11.52
9/6/2019	9/6/2018	9/5/2019	239	0.5558	0.5520	0.0159	1.933	-0.08%	1.572	12.69	1.356	11.59
9/9/2019	9/9/2018	9/8/2019	238	0.5550	0.5512	0.0160	1.932	-0.07%	1.571	12.65	1.351	11.53
9/10/2019	9/10/2018	9/9/2019	239	0.5580	0.5543	0.0159	1.935	-0.06%	1.572	12.68	1.348	11.71
9/11/2019	9/11/2018	9/10/2019	239	0.5591	0.5554	0.0159	1.932	-0.05%	1.564	12.64	1.344	11.81
9/12/2019	9/12/2018	9/11/2019	239	0.5600	0.5562	0.0159	1.928	-0.05%	1.560	12.64	1.347	11.85
9/13/2019	9/13/2018	9/12/2019	239	0.5595	0.5557	0.0159	1.911	-0.06%	1.557	12.61	1.348	11.86
9/16/2019	9/16/2018	9/15/2019	238	0.5652	0.5615	0.0159	1.921	-0.05%	1.557	12.64	1.354	12.07
9/17/2019	9/17/2018	9/16/2019	239	0.5662	0.5625	0.0159	1.921	-0.06%	1.561	12.70	1.356	12.11
9/18/2019	9/18/2018	9/17/2019	239	0.5673	0.5637	0.0159	1.917	-0.07%	1.559	12.69	1.362	12.19
9/19/2019	9/19/2018	9/18/2019	239	0.5671	0.5634	0.0159	1.914	-0.08%	1.560	12.68	1.362	12.18
9/20/2019	9/20/2018	9/19/2019	239	0.5654	0.5617	0.0159	1.916	-0.08%	1.559	12.69	1.360	12.09
9/23/2019	9/23/2018	9/22/2019	238	0.5655	0.5618	0.0159	1.913	-0.09%	1.555	12.63	1.363	12.10
9/24/2019	9/24/2018	9/23/2019	239	0.5679	0.5643	0.0159	1.908	-0.10%	1.562	12.71	1.369	12.20
9/25/2019	9/25/2018	9/24/2019	239	0.5681	0.5644	0.0159	1.903	-0.11%	1.564	12.70	1.372	12.21
9/26/2019	9/26/2018	9/25/2019	239	0.5683	0.5647	0.0159	1.906	-0.10%	1.560	12.68	1.371	12.24
9/27/2019	9/27/2018	9/26/2019	239	0.5675	0.5639	0.0159	1.899	-0.10%	1.559	12.65	1.373	12.23
9/30/2019	9/30/2018	9/29/2019	238	0.5652	0.5615	0.0159	1.907	-0.08%	1.554	12.59	1.370	12.12
10/1/2019	10/1/2018	9/30/2019	239	0.5649	0.5613	0.0159	1.913	-0.08%	1.554	12.61	1.370	12.14
10/2/2019	10/2/2018	10/1/2019	239	0.5659	0.5622	0.0159	1.908	-0.08%	1.562	12.67	1.371	12.13
10/4/2019	10/4/2018	10/3/2019	239	0.5624	0.5587	0.0160	1.913	-0.08%	1.538	12.58	1.366	12.04
10/7/2019	10/7/2018	10/6/2019	238	0.5613	0.5575	0.0160	1.928	-0.10%	1.536	12.54	1.389	11.97
10/8/2019	10/8/2018	10/7/2019	239	0.5602	0.5565	0.0160	1.923	-0.11%	1.534	12.54	1.386	11.97
10/9/2019	10/9/2018	10/8/2019	239	0.5617	0.5579	0.0160	1.927	-0.11%	1.536	12.61	1.385	11.97
10/10/2019	10/10/2018	10/9/2019	239	0.5605	0.5568	0.0160	1.927	-0.11%	1.534	12.59	1.382	11.94
10/11/2019	10/11/2018	10/10/2019	239	0.5630	0.5593	0.0160	1.914	-0.11%	1.560	12.75	1.381	11.90
10/14/2019	10/14/2018	10/13/2019	238	0.5779	0.5743	0.0159	1.935	-0.11%	1.633	13.25	1.394	12.09
10/15/2019	10/15/2018	10/14/2019	239	0.5759	0.5723	0.0160	1.926	-0.10%	1.627	13.21	1.394	12.08
10/16/2019	10/16/2018	10/15/2019	239	0.5794	0.5758	0.0159	1.942	-0.10%	1.634	13.32	1.392	12.15
10/17/2019	10/17/2018	10/16/2019	239	0.5797	0.5761	0.0159	1.946	-0.10%	1.635	13.31	1.398	12.18
10/18/2019	10/18/2018	10/17/2019	239	0.5789	0.5753	0.0159	1.944	-0.10%	1.635	13.31	1.394	12.14
10/21/2019	10/21/2018	10/20/2019	238	0.5777	0.5741	0.0160	1.944	-0.10%	1.632	13.24	1.391	12.09
10/22/2019	10/22/2018	10/21/2019	239	0.5804	0.5768	0.0159	1.945	-0.09%	1.636	13.31	1.393	12.21
10/23/2019	10/23/2018	10/22/2019	239	0.5783	0.5747	0.0160	1.939	-0.10%	1.634	13.24	1.394	12.18
10/24/2019	10/24/2018	10/23/2019	239	0.5824	0.5789	0.0159	1.933	-0.10%	1.658	13.37	1.397	12.27
10/25/2019	10/25/2018	10/24/2019	240	0.5814	0.5779	0.0159	1.927	-0.11%	1.654	13.34	1.400	12.30
10/28/2019	10/28/2018	10/27/2019	239	0.5827	0.5791	0.0158	1.943	-0.10%	1.647	13.25	1.418	12.41
10/29/2019	10/29/2018	10/28/2019	240	0.5825	0.5790	0.0158	1.942	-0.10%	1.647	13.28	1.417	12.43
10/30/2019	10/30/2018	10/29/2019	240	0.5882	0.5847	0.0157	1.936	-0.11%	1.647	13.36	1.447	12.65

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
10/31/2019	10/31/2018	10/30/2019	239	0.5894	0.5860	0.0157	1.917	-0.11%	1.647	13.35	1.454	12.67
11/1/2019	11/1/2018	10/31/2019	239	0.5940	0.5906	0.0156	1.889	-0.11%	1.673	13.47	1.461	12.80
11/4/2019	11/4/2018	11/3/2019	238	0.6009	0.5975	0.0155	1.912	-0.13%	1.671	13.64	1.457	12.95
11/5/2019	11/5/2018	11/4/2019	239	0.6035	0.6002	0.0154	1.914	-0.12%	1.681	13.74	1.464	13.06
11/6/2019	11/6/2018	11/5/2019	239	0.6049	0.6016	0.0154	1.919	-0.11%	1.680	13.74	1.470	13.13
11/7/2019	11/7/2018	11/6/2019	239	0.6051	0.6017	0.0154	1.920	-0.10%	1.685	13.79	1.466	13.10
11/8/2019	11/8/2018	11/7/2019	239	0.6057	0.6024	0.0154	1.900	-0.09%	1.697	13.81	1.468	13.10
11/11/2019	11/11/2018	11/10/2019	238	0.6118	0.6085	0.0153	1.908	-0.09%	1.701	13.87	1.493	13.34
11/12/2019	11/12/2018	11/11/2019	239	0.6118	0.6085	0.0153	1.909	-0.10%	1.701	13.90	1.493	13.37
11/13/2019	11/13/2018	11/12/2019	239	0.6088	0.6055	0.0153	1.908	-0.09%	1.696	13.76	1.493	13.34
11/14/2019	11/14/2018	11/13/2019	239	0.6105	0.6072	0.0154	1.908	-0.11%	1.703	13.77	1.506	13.42
11/15/2019	11/15/2018	11/14/2019	239	0.6106	0.6073	0.0154	1.904	-0.12%	1.709	13.77	1.506	13.43
11/18/2019	11/18/2018	11/17/2019	238	0.6114	0.6081	0.0154	1.910	-0.12%	1.709	13.76	1.507	13.43
11/19/2019	11/19/2018	11/18/2019	239	0.6113	0.6080	0.0154	1.912	-0.11%	1.710	13.79	1.506	13.45
11/20/2019	11/20/2018	11/19/2019	239	0.6107	0.6074	0.0154	1.910	-0.12%	1.713	13.79	1.506	13.42
11/21/2019	11/21/2018	11/20/2019	239	0.6070	0.6037	0.0153	1.916	-0.11%	1.689	13.53	1.507	13.47
11/22/2019	11/22/2018	11/21/2019	239	0.6056	0.6023	0.0153	1.914	-0.10%	1.680	13.46	1.507	13.46
11/25/2019	11/25/2018	11/24/2019	239	0.6050	0.6017	0.0153	1.915	-0.10%	1.678	13.42	1.508	13.47
11/26/2019	11/26/2018	11/25/2019	240	0.6045	0.6012	0.0153	1.913	-0.11%	1.672	13.41	1.509	13.51
11/27/2019	11/27/2018	11/26/2019	240	0.6006	0.5973	0.0153	1.926	-0.13%	1.654	13.29	1.498	13.41
11/29/2019	11/29/2018	11/28/2019	239	0.6028	0.5994	0.0152	1.910	-0.12%	1.659	13.33	1.498	13.43
12/2/2019	12/2/2018	12/1/2019	238	0.6113	0.6079	0.0150	1.956	-0.10%	1.709	13.85	1.471	13.33
12/3/2019	12/3/2018	12/2/2019	239	0.6114	0.6081	0.0150	1.957	-0.09%	1.707	13.90	1.470	13.35
12/4/2019	12/4/2018	12/3/2019	239	0.6101	0.6068	0.0150	1.961	-0.10%	1.703	13.81	1.466	13.36
12/5/2019	12/5/2018	12/4/2019	239	0.6087	0.6054	0.0150	1.944	-0.09%	1.699	13.78	1.468	13.31
12/6/2019	12/6/2018	12/5/2019	240	0.6086	0.6053	0.0150	1.943	-0.09%	1.699	13.81	1.467	13.33
12/9/2019	12/9/2018	12/8/2019	239	0.6123	0.6090	0.0148	1.968	-0.10%	1.813	13.85	1.470	13.45
12/10/2019	12/10/2018	12/9/2019	240	0.6118	0.6086	0.0148	1.974	-0.10%	1.812	13.87	1.469	13.46
12/11/2019	12/11/2018	12/10/2019	240	0.6032	0.5998	0.0148	1.974	-0.09%	1.784	13.41	1.467	13.43
12/12/2019	12/12/2018	12/11/2019	240	0.6018	0.5985	0.0148	1.931	-0.09%	1.786	13.33	1.469	13.44
12/13/2019	12/13/2018	12/12/2019	240	0.6170	0.6138	0.0144	1.993	-0.09%	1.761	13.45	1.502	14.17
12/16/2019	12/16/2018	12/15/2019	239	0.6174	0.6141	0.0144	1.989	-0.11%	1.786	13.50	1.503	14.09
12/17/2019	12/17/2018	12/16/2019	240	0.6197	0.6165	0.0144	1.991	-0.11%	1.800	13.67	1.506	14.12
12/18/2019	12/18/2018	12/17/2019	240	0.6192	0.6160	0.0144	1.992	-0.10%	1.792	13.60	1.508	14.16
12/19/2019	12/19/2018	12/18/2019	240	0.6192	0.6160	0.0144	1.988	-0.11%	1.811	13.66	1.507	14.10
12/20/2019	12/20/2018	12/19/2019	240	0.6180	0.6148	0.0144	1.984	-0.09%	1.814	13.66	1.501	14.03
12/23/2019	12/23/2018	12/22/2019	239	0.6127	0.6095	0.0142	2.004	-0.09%	1.764	12.97	1.521	14.32
12/27/2019	12/27/2018	12/26/2019	240	0.6129	0.6096	0.0142	1.997	-0.10%	1.764	12.98	1.525	14.38
1/2/2020	1/2/2019	1/1/2020	240	0.6084	0.6051	0.0142	1.976	-0.10%	1.736	12.71	1.523	14.38
1/3/2020	1/3/2019	1/2/2020	240	0.5913	0.5879	0.0146	1.956	-0.07%	1.678	11.79	1.545	14.28
1/6/2020	1/6/2019	1/5/2020	239	0.5867	0.5832	0.0146	2.006	-0.09%	1.648	11.48	1.539	14.26
1/7/2020	1/7/2019	1/6/2020	240	0.5870	0.5835	0.0145	2.006	-0.09%	1.649	11.52	1.539	14.29
1/8/2020	1/8/2019	1/7/2020	240	0.5771	0.5736	0.0148	1.972	-0.07%	1.663	11.34	1.528	13.96

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
1/9/2020	1/9/2019	1/8/2020	240	0.5773	0.5738	0.0148	1.895	-0.06%	1.661	11.29	1.545	14.01
1/10/2020	1/10/2019	1/9/2020	240	0.5854	0.5819	0.0146	1.930	-0.05%	1.717	11.75	1.528	14.02
1/13/2020	1/13/2019	1/12/2020	239	0.5848	0.5813	0.0147	1.926	-0.05%	1.717	11.71	1.523	13.97
1/14/2020	1/14/2019	1/13/2020	240	0.5841	0.5806	0.0147	1.928	-0.06%	1.717	11.72	1.524	13.98
1/15/2020	1/15/2019	1/14/2020	240	0.5870	0.5835	0.0146	1.930	-0.05%	1.722	11.77	1.526	14.08
1/16/2020	1/16/2019	1/15/2020	240	0.5888	0.5853	0.0146	1.916	-0.06%	1.719	11.74	1.520	14.20
1/17/2020	1/17/2019	1/16/2020	240	0.5715	0.5679	0.0145	1.882	-0.09%	1.680	11.56	1.471	13.51
1/21/2020	1/21/2019	1/20/2020	239	0.5696	0.5660	0.0144	1.896	-0.08%	1.668	11.43	1.460	13.48
1/22/2020	1/22/2019	1/21/2020	240	0.5702	0.5665	0.0144	1.896	-0.08%	1.669	11.46	1.460	13.53
1/23/2020	1/23/2019	1/22/2020	240	0.5668	0.5632	0.0144	1.882	-0.07%	1.666	11.37	1.454	13.45
1/24/2020	1/24/2019	1/23/2020	240	0.5626	0.5589	0.0145	1.834	-0.07%	1.656	11.26	1.450	13.34
1/27/2020	1/27/2019	1/26/2020	239	0.5602	0.5564	0.0145	1.792	-0.06%	1.641	11.13	1.440	13.30
1/28/2020	1/28/2019	1/27/2020	240	0.5584	0.5546	0.0145	1.782	-0.05%	1.600	11.06	1.443	13.32
1/29/2020	1/29/2019	1/28/2020	240	0.5591	0.5554	0.0145	1.789	-0.05%	1.609	11.09	1.445	13.33
1/30/2020	1/30/2019	1/29/2020	240	0.5581	0.5544	0.0145	1.788	-0.05%	1.610	11.08	1.443	13.29
1/31/2020	1/31/2019	1/30/2020	239	0.5580	0.5543	0.0145	1.788	-0.05%	1.616	11.09	1.442	13.23
2/3/2020	2/3/2019	2/2/2020	239	0.5521	0.5483	0.0145	1.792	-0.02%	1.690	11.52	1.424	12.57
2/4/2020	2/4/2019	2/3/2020	240	0.5494	0.5456	0.0146	1.790	-0.03%	1.686	11.47	1.424	12.54
2/5/2020	2/5/2019	2/4/2020	240	0.5464	0.5426	0.0146	1.772	-0.04%	1.659	11.36	1.425	12.51
2/6/2020	2/6/2019	2/5/2020	240	0.5479	0.5441	0.0146	1.783	-0.04%	1.658	11.35	1.433	12.59
2/7/2020	2/7/2019	2/6/2020	240	0.4932	0.4889	0.0165	1.594	0.00%	1.733	10.49	1.417	10.98
2/10/2020	2/10/2019	2/9/2020	239	0.4843	0.4800	0.0164	1.759	0.04%	1.654	9.98	1.414	11.05
2/11/2020	2/11/2019	2/10/2020	240	0.4844	0.4800	0.0164	1.770	0.04%	1.656	10.01	1.415	11.07
2/12/2020	2/12/2019	2/11/2020	240	0.4853	0.4809	0.0164	1.778	0.04%	1.660	10.04	1.416	11.08
2/13/2020	2/13/2019	2/12/2020	240	0.4836	0.4792	0.0164	1.764	0.05%	1.665	9.98	1.420	11.06
2/14/2020	2/14/2019	2/13/2020	240	0.4802	0.4758	0.0165	1.748	0.06%	1.662	9.91	1.416	10.99
2/18/2020	2/18/2019	2/17/2020	239	0.4700	0.4655	0.0165	1.753	0.06%	1.629	9.67	1.402	10.76
2/19/2020	2/19/2019	2/18/2020	240	0.4717	0.4673	0.0165	1.753	0.05%	1.636	9.76	1.397	10.79
2/20/2020	2/20/2019	2/19/2020	240	0.4661	0.4616	0.0166	1.751	0.05%	1.637	9.73	1.389	10.60
2/21/2020	2/21/2019	2/20/2020	240	0.4658	0.4612	0.0166	1.758	0.06%	1.625	9.70	1.388	10.61
2/24/2020	2/24/2019	2/23/2020	239	0.4656	0.4611	0.0167	1.748	0.05%	1.640	9.70	1.394	10.56
2/25/2020	2/25/2019	2/24/2020	240	0.4784	0.4740	0.0167	1.741	0.04%	1.682	10.35	1.387	10.50
2/26/2020	2/26/2019	2/25/2020	240	0.4784	0.4740	0.0167	1.747	0.04%	1.665	10.37	1.387	10.48
2/27/2020	2/27/2019	2/26/2020	240	0.4756	0.4712	0.0168	1.741	0.04%	1.658	10.31	1.383	10.43
2/28/2020	2/28/2019	2/27/2020	240	0.4929	0.4886	0.0167	1.754	0.03%	1.682	11.07	1.376	10.38
3/2/2020	3/2/2019	3/1/2020	239	0.5048	0.5006	0.0167	1.762	0.02%	1.660	11.48	1.372	10.43
3/3/2020	3/3/2019	3/2/2020	240	0.5021	0.4979	0.0168	1.733	-0.01%	1.519	10.67	1.437	11.19
3/4/2020	3/4/2019	3/3/2020	241	0.5015	0.4973	0.0169	1.720	-0.02%	1.488	10.46	1.457	11.40
3/5/2020	3/5/2019	3/4/2020	241	0.5015	0.4973	0.0169	1.731	-0.03%	1.488	10.46	1.453	11.40
3/6/2020	3/6/2019	3/5/2020	241	0.5044	0.5002	0.0169	1.731	-0.04%	1.481	10.41	1.460	11.57
3/9/2020	3/9/2019	3/8/2020	239	0.5035	0.4993	0.0169	1.700	-0.03%	1.448	10.47	1.439	11.39
3/10/2020	3/10/2019	3/9/2020	240	0.5632	0.5595	0.0168	1.706	-0.05%	1.623	12.87	1.441	11.83
3/11/2020	3/11/2019	3/10/2020	241	0.5632	0.5596	0.0168	1.706	-0.04%	1.600	12.79	1.439	11.97

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
3/12/2020	3/12/2019	3/11/2020	241	0.5606	0.5569	0.0167	1.684	-0.04%	1.569	12.57	1.403	12.07
3/13/2020	3/13/2019	3/12/2020	241	0.6323	0.6292	0.0169	1.677	-0.03%	1.707	16.51	1.374	11.70
3/16/2020	3/16/2019	3/15/2020	239	0.6355	0.6324	0.0170	1.655	0.00%	1.713	16.45	1.309	11.86
3/17/2020	3/17/2019	3/16/2020	240	0.6327	0.6296	0.0171	1.677	-0.01%	1.716	16.51	1.271	11.64
3/18/2020	3/18/2019	3/17/2020	241	0.6349	0.6319	0.0171	1.665	0.02%	1.711	16.44	1.294	11.99
3/19/2020	3/19/2019	3/18/2020	241	0.5955	0.5921	0.0179	1.533	0.02%	1.578	15.05	1.260	11.13
3/20/2020	3/20/2019	3/19/2020	241	0.5945	0.5911	0.0181	1.516	0.06%	1.601	15.10	1.261	11.00
3/23/2020	3/23/2019	3/22/2020	239	0.5902	0.5867	0.0181	1.554	0.09%	1.606	15.06	1.252	10.63
3/24/2020	3/24/2019	3/23/2020	240	0.5553	0.5515	0.0189	1.532	0.11%	1.495	13.99	1.223	10.01
3/25/2020	3/25/2019	3/24/2020	241	0.5884	0.5849	0.0188	1.604	0.11%	1.494	15.48	1.223	10.03
3/26/2020	3/26/2019	3/25/2020	241	0.5909	0.5874	0.0188	1.605	0.10%	1.468	15.55	1.212	10.09
3/27/2020	3/27/2019	3/26/2020	241	0.5677	0.5640	0.0194	1.578	0.07%	1.427	14.85	1.183	9.59
3/30/2020	3/30/2019	3/29/2020	239	0.5787	0.5751	0.0193	1.587	0.06%	1.448	15.11	1.196	9.80
3/31/2020	3/31/2019	3/30/2020	240	0.5788	0.5753	0.0193	1.590	0.05%	1.439	15.07	1.201	9.93
4/1/2020	4/1/2019	3/31/2020	241	0.5775	0.5739	0.0193	1.590	0.05%	1.441	15.11	1.188	9.85
4/2/2020	4/2/2019	4/1/2020	241	0.5764	0.5729	0.0194	1.558	0.04%	1.436	15.26	1.143	9.55
4/3/2020	4/3/2019	4/2/2020	241	0.5755	0.5719	0.0195	1.583	0.03%	1.436	15.24	1.141	9.51
4/6/2020	4/6/2019	4/5/2020	239	0.5768	0.5732	0.0195	1.584	0.04%	1.439	15.22	1.147	9.49
4/7/2020	4/7/2019	4/6/2020	240	0.5825	0.5789	0.0197	1.582	0.05%	1.461	15.67	1.117	9.23
4/8/2020	4/8/2019	4/7/2020	241	0.5873	0.5838	0.0197	1.609	0.05%	1.458	15.93	1.114	9.22
4/9/2020	4/9/2019	4/8/2020	241	0.5851	0.5817	0.0197	1.599	0.05%	1.459	15.87	1.109	9.15
4/14/2020	4/14/2019	4/13/2020	238	0.5710	0.5674	0.0201	1.536	0.02%	1.447	15.52	1.040	8.49
4/15/2020	4/15/2019	4/14/2020	239	0.5569	0.5532	0.0204	1.608	0.02%	1.446	15.31	0.923	7.89
4/16/2020	4/16/2019	4/15/2020	239	0.5639	0.5602	0.0207	1.680	0.00%	1.474	15.49	0.950	8.07
4/17/2020	4/17/2019	4/16/2020	239	0.5563	0.5525	0.0208	1.719	0.00%	1.474	15.36	0.899	7.73
4/20/2020	4/20/2019	4/19/2020	238	0.5604	0.5566	0.0209	1.747	0.00%	1.480	15.47	0.901	7.76
4/21/2020	4/21/2019	4/20/2020	239	0.5582	0.5545	0.0209	1.739	-0.01%	1.477	15.44	0.899	7.74
4/22/2020	4/22/2019	4/21/2020	240	0.5647	0.5610	0.0208	1.744	-0.01%	1.475	15.72	0.899	7.76
4/23/2020	4/23/2019	4/22/2020	241	0.5652	0.5616	0.0208	1.744	-0.01%	1.472	15.77	0.899	7.78
4/24/2020	4/24/2019	4/23/2020	241	0.5659	0.5623	0.0208	1.743	0.01%	1.480	15.86	0.890	7.67
4/27/2020	4/27/2019	4/26/2020	240	0.5655	0.5619	0.0211	1.756	-0.01%	1.490	15.79	0.903	7.69
4/28/2020	4/28/2019	4/27/2020	241	0.5786	0.5751	0.0214	1.815	0.03%	1.535	16.14	0.958	8.15
4/29/2020	4/29/2019	4/28/2020	242	0.5804	0.5769	0.0213	1.830	0.04%	1.539	16.20	0.965	8.25
4/30/2020	4/30/2019	4/29/2020	241	0.5811	0.5776	0.0214	1.832	0.04%	1.539	16.18	0.973	8.27
5/4/2020	5/4/2019	5/3/2020	239	0.5846	0.5811	0.0215	1.839	0.03%	1.547	16.17	0.990	8.41
5/5/2020	5/5/2019	5/4/2020	240	0.5884	0.5849	0.0215	1.849	0.03%	1.547	16.37	0.986	8.41
5/6/2020	5/6/2019	5/5/2020	241	0.5884	0.5849	0.0214	1.851	0.02%	1.541	16.41	0.987	8.43
5/7/2020	5/7/2019	5/6/2020	241	0.5894	0.5860	0.0214	1.853	0.01%	1.542	16.42	0.984	8.49
5/8/2020	5/8/2019	5/7/2020	241	0.5904	0.5870	0.0214	1.853	0.03%	1.543	16.42	0.986	8.56
5/11/2020	5/11/2019	5/10/2020	239	0.5890	0.5855	0.0215	1.850	0.01%	1.537	16.28	0.989	8.55
5/12/2020	5/12/2019	5/11/2020	240	0.5900	0.5866	0.0215	1.852	0.00%	1.537	16.32	0.988	8.65
5/13/2020	5/13/2019	5/12/2020	241	0.5862	0.5828	0.0215	1.840	0.01%	1.538	16.27	0.970	8.51
5/14/2020	5/14/2019	5/13/2020	240	0.5856	0.5821	0.0216	1.840	0.01%	1.537	16.21	0.971	8.49

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
5/15/2020	5/15/2019	5/14/2020	240	0.5854	0.5819	0.0216	1.853	0.02%	1.531	16.18	0.968	8.53
5/18/2020	5/18/2019	5/17/2020	238	0.5824	0.5788	0.0218	1.841	0.02%	1.526	16.00	0.971	8.46
5/19/2020	5/19/2019	5/18/2020	239	0.5922	0.5888	0.0219	1.860	0.03%	1.558	16.48	0.973	8.44
5/20/2020	5/20/2019	5/19/2020	240	0.5919	0.5885	0.0218	1.881	0.03%	1.558	16.51	0.971	8.44
5/21/2020	5/21/2019	5/20/2020	240	0.5907	0.5872	0.0219	1.882	0.05%	1.560	16.48	0.969	8.40
5/22/2020	5/22/2019	5/21/2020	240	0.5910	0.5875	0.0219	1.895	0.05%	1.561	16.49	0.968	8.39
5/26/2020	5/26/2019	5/25/2020	238	0.5912	0.5877	0.0220	1.902	0.07%	1.560	16.43	0.966	8.36
5/27/2020	5/27/2019	5/26/2020	239	0.6022	0.5989	0.0222	1.880	0.10%	1.599	16.79	1.003	8.69
5/28/2020	5/28/2019	5/27/2020	240	0.6036	0.6003	0.0221	1.908	0.12%	1.595	16.78	0.988	8.91
5/29/2020	5/29/2019	5/28/2020	240	0.6038	0.6005	0.0221	1.910	0.11%	1.583	16.73	0.986	9.02
6/2/2020	6/2/2019	6/1/2020	238	0.6042	0.6008	0.0222	1.908	0.10%	1.587	16.66	0.990	9.01
6/3/2020	6/3/2019	6/2/2020	239	0.6064	0.6031	0.0222	1.910	0.11%	1.595	16.80	0.990	9.02
6/4/2020	6/4/2019	6/3/2020	239	0.6053	0.6020	0.0223	1.912	0.12%	1.592	16.80	0.977	8.93
6/5/2020	6/5/2019	6/4/2020	239	0.6034	0.6000	0.0223	1.916	0.11%	1.587	16.73	0.975	8.89
6/8/2020	6/8/2019	6/7/2020	237	0.6072	0.6039	0.0223	1.922	0.15%	1.603	16.94	0.943	8.65
6/9/2020	6/9/2019	6/8/2020	238	0.6070	0.6037	0.0223	1.933	0.17%	1.604	16.95	0.948	8.71
6/10/2020	6/10/2019	6/9/2020	239	0.6086	0.6053	0.0223	1.946	0.15%	1.604	16.95	0.963	8.92
6/11/2020	6/11/2019	6/10/2020	240	0.6060	0.6027	0.0223	1.951	0.15%	1.603	16.92	0.954	8.85
6/12/2020	6/12/2019	6/11/2020	240	0.6115	0.6082	0.0223	1.950	0.14%	1.610	17.18	0.940	8.82
6/15/2020	6/15/2019	6/14/2020	238	0.6104	0.6071	0.0224	1.944	0.16%	1.601	17.02	0.948	8.87
6/16/2020	6/16/2019	6/15/2020	239	0.6103	0.6070	0.0224	1.946	0.17%	1.600	17.05	0.948	8.89
6/17/2020	6/17/2019	6/16/2020	240	0.6099	0.6066	0.0224	1.945	0.15%	1.586	17.05	0.951	8.92
6/18/2020	6/18/2019	6/17/2020	240	0.6099	0.6066	0.0224	1.946	0.15%	1.585	17.05	0.951	8.93
6/19/2020	6/19/2019	6/18/2020	240	0.6103	0.6070	0.0223	1.954	0.13%	1.583	17.05	0.954	8.97
6/22/2020	6/22/2019	6/21/2020	238	0.6099	0.6066	0.0224	1.954	0.14%	1.589	17.06	0.941	8.74
6/23/2020	6/23/2019	6/22/2020	239	0.6099	0.6066	0.0223	1.954	0.14%	1.589	17.10	0.941	8.76
6/24/2020	6/24/2019	6/23/2020	240	0.6106	0.6074	0.0223	1.953	0.14%	1.590	17.17	0.940	8.76
6/25/2020	6/25/2019	6/24/2020	239	0.6104	0.6071	0.0223	1.952	0.15%	1.590	17.14	0.938	8.72
6/26/2020	6/26/2019	6/25/2020	239	0.6109	0.6076	0.0224	1.946	0.16%	1.589	17.11	0.945	8.82
6/29/2020	6/29/2019	6/28/2020	236	0.6111	0.6078	0.0224	1.945	0.13%	1.591	17.09	0.931	8.62
6/30/2020	6/30/2019	6/29/2020	237	0.6098	0.6065	0.0224	1.934	0.15%	1.591	17.06	0.935	8.65
7/1/2020	7/1/2019	6/30/2020	238	0.6098	0.6064	0.0224	1.943	0.14%	1.589	17.08	0.936	8.68
7/2/2020	7/2/2019	7/1/2020	238	0.6107	0.6074	0.0224	1.944	0.14%	1.589	17.09	0.940	8.74
7/6/2020	7/6/2019	7/5/2020	236	0.6129	0.6095	0.0224	1.907	0.12%	1.592	17.14	0.933	8.66
7/7/2020	7/7/2019	7/6/2020	237	0.6133	0.6100	0.0223	1.904	0.12%	1.593	17.21	0.931	8.66
7/8/2020	7/8/2019	7/7/2020	237	0.6133	0.6100	0.0223	1.904	0.12%	1.593	17.21	0.931	8.66
7/9/2020	7/9/2019	7/8/2020	237	0.6188	0.6156	0.0221	1.951	0.14%	1.591	17.40	0.933	8.78
7/10/2020	7/10/2019	7/9/2020	236	0.6223	0.6190	0.0219	1.964	0.16%	1.589	17.48	0.935	8.84
7/13/2020	7/13/2019	7/12/2020	234	0.6232	0.6200	0.0220	1.966	0.15%	1.590	17.45	0.931	8.81
7/14/2020	7/14/2019	7/13/2020	234	0.6232	0.6200	0.0220	1.966	0.15%	1.590	17.45	0.931	8.81
7/15/2020	7/15/2019	7/14/2020	234	0.6232	0.6200	0.0220	1.966	0.15%	1.590	17.45	0.931	8.81
7/16/2020	7/16/2019	7/15/2020	234	0.6239	0.6207	0.0220	1.967	0.14%	1.586	17.46	0.933	8.85
7/17/2020	7/17/2019	7/16/2020	234	0.6271	0.6238	0.0218	1.957	0.12%	1.587	17.60	0.927	8.87

Exhibit 11D**Deutsche Bank AG (GY)****Rolling Regression Model Results**

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
7/20/2020	7/20/2019	7/19/2020	232	0.6287	0.6255	0.0219	1.964	0.13%	1.588	17.58	0.925	8.87
7/21/2020	7/21/2019	7/20/2020	233	0.6280	0.6248	0.0218	1.959	0.14%	1.588	17.61	0.920	8.85
7/23/2020	7/22/2019	7/21/2020	234	0.6137	0.6103	0.0223	1.936	0.11%	1.578	17.16	0.902	8.52
7/23/2020	7/23/2019	7/22/2020	234	0.6134	0.6100	0.0223	1.991	0.11%	1.578	17.16	0.900	8.49
7/24/2020	7/24/2019	7/23/2020	234	0.6119	0.6085	0.0223	1.994	0.09%	1.576	17.11	0.899	8.46
7/27/2020	7/27/2019	7/26/2020	233	0.6126	0.6093	0.0223	1.996	0.09%	1.571	17.08	0.896	8.48
7/28/2020	7/28/2019	7/27/2020	234	0.6128	0.6095	0.0223	1.994	0.08%	1.570	17.09	0.901	8.57
7/29/2020	7/29/2019	7/28/2020	234	0.6128	0.6095	0.0223	1.994	0.08%	1.570	17.09	0.901	8.57
7/30/2020	7/30/2019	7/29/2020	233	0.6130	0.6096	0.0223	1.995	0.08%	1.570	17.06	0.901	8.56
7/31/2020	7/31/2019	7/30/2020	233	0.6131	0.6097	0.0223	1.986	0.08%	1.571	17.07	0.900	8.54
8/3/2020	8/3/2019	8/2/2020	231	0.6158	0.6125	0.0223	1.998	0.06%	1.583	17.11	0.900	8.54
8/4/2020	8/4/2019	8/3/2020	232	0.6162	0.6128	0.0223	1.994	0.06%	1.585	17.17	0.897	8.53
8/5/2020	8/5/2019	8/4/2020	233	0.6162	0.6129	0.0223	1.996	0.06%	1.585	17.21	0.897	8.55
8/6/2020	8/6/2019	8/5/2020	233	0.6154	0.6120	0.0223	1.990	0.05%	1.586	17.18	0.896	8.54
8/7/2020	8/7/2019	8/6/2020	233	0.6156	0.6123	0.0223	1.994	0.05%	1.585	17.18	0.897	8.56
8/10/2020	8/10/2019	8/9/2020	231	0.6135	0.6101	0.0223	1.983	0.06%	1.579	17.04	0.891	8.45
8/11/2020	8/11/2019	8/10/2020	232	0.6150	0.6116	0.0222	1.983	0.08%	1.578	17.08	0.892	8.61
8/12/2020	8/12/2019	8/11/2020	233	0.6158	0.6124	0.0222	1.982	0.08%	1.580	17.14	0.890	8.64
8/13/2020	8/13/2019	8/12/2020	233	0.6183	0.6150	0.0220	2.002	0.10%	1.576	17.25	0.882	8.65
8/14/2020	8/14/2019	8/13/2020	233	0.6188	0.6155	0.0220	2.002	0.09%	1.576	17.24	0.885	8.73
8/17/2020	8/17/2019	8/16/2020	231	0.6154	0.6120	0.0220	2.000	0.10%	1.560	17.01	0.881	8.68
8/18/2020	8/18/2019	8/17/2020	232	0.6157	0.6123	0.0219	2.001	0.09%	1.559	17.04	0.880	8.74
8/19/2020	8/19/2019	8/18/2020	233	0.6158	0.6124	0.0219	2.001	0.09%	1.559	17.08	0.879	8.77
8/20/2020	8/20/2019	8/19/2020	233	0.6149	0.6116	0.0219	1.999	0.09%	1.559	17.04	0.881	8.78
8/21/2020	8/21/2019	8/20/2020	233	0.6158	0.6125	0.0219	2.006	0.09%	1.561	17.07	0.884	8.80
8/24/2020	8/24/2019	8/23/2020	231	0.6155	0.6122	0.0220	2.004	0.07%	1.563	17.00	0.881	8.72
8/25/2020	8/25/2019	8/24/2020	232	0.6165	0.6131	0.0220	2.005	0.08%	1.567	17.07	0.885	8.77
8/26/2020	8/26/2019	8/25/2020	233	0.6164	0.6131	0.0220	2.010	0.08%	1.567	17.10	0.884	8.78
8/27/2020	8/27/2019	8/26/2020	233	0.6157	0.6123	0.0220	2.005	0.08%	1.568	17.09	0.879	8.74
8/28/2020	8/28/2019	8/27/2020	233	0.6156	0.6123	0.0220	2.012	0.07%	1.567	17.08	0.881	8.76
8/31/2020	8/31/2019	8/30/2020	231	0.6153	0.6120	0.0221	2.007	0.07%	1.567	17.00	0.881	8.71
9/1/2020	9/1/2019	8/31/2020	232	0.6157	0.6123	0.0221	2.003	0.06%	1.567	17.01	0.887	8.81
9/2/2020	9/2/2019	9/1/2020	233	0.6157	0.6124	0.0220	2.005	0.05%	1.567	17.04	0.888	8.84
9/3/2020	9/3/2019	9/2/2020	234	0.6149	0.6115	0.0220	2.001	0.05%	1.566	17.05	0.888	8.84
9/4/2020	9/4/2019	9/3/2020	234	0.6163	0.6130	0.0220	2.007	0.05%	1.562	17.07	0.890	8.93
9/8/2020	9/8/2019	9/7/2020	232	0.6109	0.6075	0.0221	2.004	0.07%	1.524	16.58	0.915	9.21
9/9/2020	9/9/2019	9/8/2020	233	0.6113	0.6079	0.0221	2.026	0.06%	1.526	16.62	0.918	9.25
9/10/2020	9/10/2019	9/9/2020	233	0.6106	0.6072	0.0221	2.030	0.04%	1.526	16.64	0.914	9.16
9/11/2020	9/11/2019	9/10/2020	232	0.6103	0.6069	0.0222	2.030	0.03%	1.529	16.62	0.913	9.08
9/14/2020	9/14/2019	9/13/2020	230	0.6099	0.6065	0.0223	2.023	0.03%	1.532	16.60	0.904	8.91
9/15/2020	9/15/2019	9/14/2020	231	0.6096	0.6062	0.0222	2.021	0.03%	1.531	16.63	0.903	8.92
9/16/2020	9/16/2019	9/15/2020	232	0.6105	0.6071	0.0222	2.022	0.01%	1.528	16.64	0.902	9.05
9/17/2020	9/17/2019	9/16/2020	232	0.6100	0.6066	0.0222	2.022	0.03%	1.527	16.62	0.903	9.05

Exhibit 11D

Deutsche Bank AG (GY)

Rolling Regression Model Results

Date	Control Period Begin	Control Period End	Num Obs	Model R2	Model Adjusted R2	Standard Error	Durbin Watson	Intercept	Market ¹		Industry Residual ²	
									Coefficient	t Statistic	Coefficient	t Statistic
9/18/2020	9/18/2019	9/17/2020	232	0.6104	0.6070	0.0222	2.028	0.04%	1.525	16.65	0.899	9.03
9/21/2020	9/19/2019	9/18/2020	232	0.6105	0.6071	0.0221	2.028	0.04%	1.526	16.66	0.899	9.02
Thereafter	9/19/2019	9/18/2020	232	0.6105	0.6071	0.0221	2.028	0.04%	1.526	16.66	0.899	9.02

[1] Market Index: MSCI World Index (Bloomberg Ticker: "MXWO Index")

[2] Industry Index: See Exhibit 11F

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
3/14/2017	18.15 €	-1.17%	-0.41%	-0.14%	-1.26%	0.08%	1.83%	0.05	3.69%
3/15/2017	18.31 €	0.88%	0.50%	0.10%	1.28%	-0.40%	1.82%	-0.22	17.13%
3/16/2017	18.13 €	-0.96%	0.77%	-1.31%	-0.34%	-0.61%	1.82%	-0.34	26.31%
3/17/2017	17.86 €	-1.49%	0.03%	-1.12%	-1.76%	0.27%	1.81%	0.15	11.86%
3/20/2017	17.20 €	-3.72%	-0.19%	-0.46%	-1.23%	-2.49%	1.81%	-1.38	83.17%
3/21/2017	16.01 €	-6.92%	-0.53%	-1.27%	-3.38%	-3.54%	1.81%	-1.96	94.87%
3/22/2017	15.73 €	-1.72%	-0.58%	-0.42%	-2.20%	0.48%	1.82%	0.26	20.65%
3/23/2017	15.76 €	0.19%	0.50%	0.12%	1.34%	-1.15%	1.82%	-0.63	47.06%
3/24/2017	15.54 €	-1.43%	0.00%	-0.53%	-0.95%	-0.48%	1.82%	-0.26	20.84%
3/27/2017	15.51 €	-0.19%	-0.35%	0.36%	-0.35%	0.16%	1.82%	0.09	6.96%
3/28/2017	15.96 €	2.90%	0.60%	0.57%	2.29%	0.61%	1.82%	0.34	26.42%
3/29/2017	16.17 €	1.32%	0.03%	-0.34%	-0.53%	1.85%	1.81%	1.02	69.00%
3/30/2017	16.04 €	-0.80%	0.26%	0.26%	1.00%	-1.81%	1.82%	-0.99	67.90%
3/31/2017	16.15 €	0.72%	-0.16%	0.28%	-0.01%	0.73%	1.81%	0.40	31.24%
4/3/2017	15.70 €	-2.79%	-0.64%	-0.98%	-3.20%	0.42%	1.81%	0.23	18.15%
4/4/2017	15.60 €	-0.67%	0.21%	0.00%	0.48%	-1.14%	1.81%	-0.63	47.27%
4/5/2017	15.65 €	0.32%	0.35%	-0.31%	0.34%	-0.02%	1.81%	-0.01	0.87%
4/6/2017	15.68 €	0.22%	-0.44%	0.06%	-1.06%	1.28%	1.81%	0.71	52.21%
4/7/2017	15.53 €	-0.96%	-0.08%	-0.45%	-0.93%	-0.02%	1.81%	-0.01	1.01%
4/10/2017	15.55 €	0.13%	0.05%	-0.45%	-0.61%	0.74%	1.81%	0.41	31.61%
4/11/2017	15.31 €	-1.58%	-0.21%	-0.30%	-1.03%	-0.55%	1.80%	-0.30	23.85%
4/12/2017	15.29 €	-0.13%	-0.01%	-0.44%	-0.75%	0.62%	1.80%	0.35	27.03%
4/13/2017	15.13 €	-1.05%	-0.05%	-0.03%	-0.19%	-0.86%	1.80%	-0.48	36.63%
4/18/2017	14.90 €	-1.49%	-0.28%	-0.58%	-1.63%	0.14%	1.80%	0.08	6.25%
4/19/2017	15.20 €	2.01%	0.22%	0.57%	1.38%	0.64%	1.80%	0.35	27.59%
4/20/2017	15.34 €	0.89%	0.21%	-0.19%	0.18%	0.71%	1.80%	0.39	30.63%
4/21/2017	15.57 €	1.50%	-0.02%	0.00%	-0.13%	1.63%	1.79%	0.91	63.59%
4/24/2017	16.99 €	9.16%	1.42%	1.03%	5.06%	4.10%	1.79%	2.29	97.68%
4/25/2017	16.94 €	-0.29%	0.62%	0.75%	2.71%	-3.01%	1.81%	-1.66	90.23%
4/26/2017	17.34 €	2.33%	0.25%	-0.69%	-0.49%	2.82%	1.81%	1.56	87.92%
4/27/2017	16.70 €	-3.66%	-0.41%	-0.74%	-2.23%	-1.43%	1.82%	-0.79	56.75%
4/28/2017	16.53 €	-1.02%	0.00%	-0.09%	-0.19%	-0.83%	1.82%	-0.46	35.18%
5/2/2017	16.68 €	0.88%	0.33%	-0.86%	-0.56%	1.43%	1.82%	0.79	56.73%
5/3/2017	16.80 €	0.75%	-0.17%	0.75%	0.70%	0.05%	1.81%	0.03	2.07%
5/4/2017	17.20 €	2.35%	0.26%	0.96%	2.10%	0.26%	1.80%	0.14	11.27%
5/5/2017	17.42 €	1.28%	0.35%	-0.92%	-0.55%	1.83%	1.80%	1.02	68.91%
5/8/2017	17.44 €	0.14%	0.11%	-0.53%	-0.52%	0.67%	1.80%	0.37	28.88%
5/9/2017	17.34 €	-0.60%	-0.04%	0.21%	0.21%	-0.81%	1.80%	-0.45	34.67%
5/10/2017	17.49 €	0.87%	0.00%	0.16%	0.26%	0.61%	1.80%	0.34	26.51%
5/11/2017	17.34 €	-0.86%	-0.34%	0.22%	-0.52%	-0.34%	1.80%	-0.19	15.09%
5/12/2017	17.19 €	-0.87%	0.26%	-0.76%	-0.48%	-0.38%	1.79%	-0.21	16.90%
5/15/2017	17.57 €	2.24%	0.47%	0.21%	1.50%	0.74%	1.79%	0.41	31.92%
5/16/2017	17.46 €	-0.63%	0.20%	-0.08%	0.37%	-0.99%	1.79%	-0.55	42.03%
5/17/2017	16.85 €	-3.49%	-0.81%	-1.69%	-4.64%	1.15%	1.79%	0.64	47.94%
5/18/2017	16.81 €	-0.27%	-0.55%	-0.27%	-1.81%	1.55%	1.79%	0.87	61.22%
5/19/2017	17.09 €	1.70%	0.81%	0.36%	2.61%	-0.92%	1.79%	-0.51	39.21%
5/22/2017	16.99 €	-0.61%	0.37%	-1.07%	-0.66%	0.04%	1.79%	0.02	1.89%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
5/23/2017	17.12 €	0.79%	0.27%	0.15%	0.91%	-0.11%	1.78%	-0.06	5.01%
5/24/2017	16.95 €	-0.99%	-0.11%	0.38%	0.25%	-1.24%	1.78%	-0.70	51.27%
5/25/2017	16.85 €	-0.59%	0.47%	-0.95%	-0.22%	-0.37%	1.78%	-0.21	16.23%
5/26/2017	16.49 €	-2.14%	-0.16%	-0.04%	-0.52%	-1.61%	1.78%	-0.91	63.38%
5/30/2017	16.14 €	-2.15%	-0.02%	-0.61%	-1.04%	-1.12%	1.79%	-0.63	46.79%
5/31/2017	15.58 €	-3.47%	-0.15%	-2.09%	-3.63%	0.16%	1.78%	0.09	7.24%
6/1/2017	15.61 €	0.22%	0.47%	-0.21%	0.84%	-0.62%	1.78%	-0.35	27.06%
6/2/2017	15.59 €	-0.13%	0.88%	-1.50%	-0.03%	-0.09%	1.78%	-0.05	4.22%
6/6/2017	15.33 €	-1.67%	-0.31%	0.37%	-0.31%	-1.36%	1.78%	-0.76	55.32%
6/7/2017	15.49 €	1.01%	-0.15%	1.10%	1.19%	-0.18%	1.78%	-0.10	8.06%
6/8/2017	15.63 €	0.90%	-0.07%	1.58%	2.16%	-1.26%	1.78%	-0.71	52.08%
6/9/2017	15.82 €	1.22%	0.27%	0.73%	1.79%	-0.57%	1.78%	-0.32	25.27%
6/12/2017	15.46 €	-2.24%	-0.61%	0.52%	-0.85%	-1.40%	1.78%	-0.78	56.66%
6/13/2017	15.57 €	0.68%	0.46%	-0.09%	1.03%	-0.35%	1.78%	-0.20	15.77%
6/14/2017	15.28 €	-1.86%	0.26%	-1.97%	-2.33%	0.46%	1.77%	0.26	20.61%
6/15/2017	15.12 €	-1.01%	-0.87%	2.17%	0.95%	-1.96%	1.77%	-1.10	72.96%
6/16/2017	15.00 €	-0.79%	0.33%	-0.69%	-0.21%	-0.58%	1.78%	-0.33	25.75%
6/19/2017	15.38 €	2.53%	0.73%	-0.32%	1.35%	1.18%	1.78%	0.67	49.34%
6/20/2017	15.22 €	-1.07%	-0.43%	0.05%	-1.09%	0.02%	1.78%	0.01	0.87%
6/21/2017	15.20 €	-0.13%	-0.30%	-0.24%	-1.19%	1.05%	1.77%	0.59	44.72%
6/22/2017	15.05 €	-0.99%	0.18%	-0.78%	-0.74%	-0.25%	1.77%	-0.14	11.03%
6/23/2017	14.90 €	-0.96%	0.08%	-0.32%	-0.34%	-0.62%	1.77%	-0.35	27.33%
6/26/2017	15.04 €	0.94%	0.13%	0.10%	0.41%	0.53%	1.77%	0.30	23.64%
6/27/2017	15.52 €	3.19%	-0.02%	1.62%	2.30%	0.90%	1.77%	0.51	38.70%
6/28/2017	15.74 €	1.42%	0.16%	1.02%	1.90%	-0.48%	1.75%	-0.28	21.81%
6/29/2017	15.83 €	0.54%	-0.47%	2.45%	2.61%	-2.07%	1.75%	-1.19	76.31%
6/30/2017	15.53 €	-1.90%	-0.25%	0.31%	-0.21%	-1.69%	1.69%	-1.00	68.04%
7/3/2017	16.10 €	3.67%	0.38%	1.60%	3.49%	0.18%	1.68%	0.11	8.66%
7/5/2017	16.36 €	1.65%	-0.21%	-0.02%	-0.61%	2.26%	1.67%	1.35	82.06%
7/6/2017	16.70 €	2.05%	-0.28%	0.85%	0.55%	1.50%	1.67%	0.90	62.95%
7/7/2017	16.68 €	-0.09%	-0.15%	-0.33%	-0.86%	0.77%	1.66%	0.47	35.83%
7/10/2017	16.58 €	-0.60%	0.33%	-0.66%	-0.07%	-0.53%	1.65%	-0.32	25.28%
7/11/2017	16.59 €	0.06%	-0.26%	-0.23%	-1.02%	1.08%	1.64%	0.66	48.71%
7/12/2017	16.44 €	-0.90%	1.00%	-1.39%	0.63%	-1.54%	1.65%	-0.93	64.81%
7/13/2017	16.52 €	0.49%	0.18%	-0.02%	0.48%	0.01%	1.64%	0.00	0.24%
7/14/2017	16.37 €	-0.91%	0.46%	-1.56%	-1.18%	0.27%	1.64%	0.17	13.25%
7/17/2017	16.35 €	-0.12%	0.20%	-0.44%	-0.17%	0.05%	1.64%	0.03	2.20%
7/18/2017	15.94 €	-2.51%	-0.07%	-0.96%	-1.65%	-0.86%	1.63%	-0.52	39.89%
7/19/2017	15.95 €	0.03%	0.43%	0.07%	1.21%	-1.18%	1.63%	-0.72	52.98%
7/20/2017	15.84 €	-0.66%	0.34%	-0.87%	-0.51%	-0.15%	1.63%	-0.09	7.35%
7/21/2017	15.63 €	-1.36%	-0.29%	-0.32%	-1.23%	-0.13%	1.63%	-0.08	6.35%
7/24/2017	16.01 €	2.46%	-0.15%	0.72%	0.75%	1.72%	1.63%	1.06	70.83%
7/25/2017	16.40 €	2.44%	0.41%	1.72%	3.77%	-1.33%	1.63%	-0.82	58.67%
7/26/2017	16.60 €	1.22%	0.07%	-0.29%	-0.27%	1.49%	1.63%	0.92	63.92%
7/27/2017	15.53 €	-6.48%	0.18%	-0.73%	-0.68%	-5.80%	1.62%	-3.57	99.96%
7/28/2017	15.41 €	-0.74%	-0.36%	-0.41%	-1.52%	0.78%	1.62%	0.48	37.03%
7/31/2017	15.09 €	-2.08%	0.15%	0.17%	0.71%	-2.79%	1.61%	-1.73	91.51%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
8/1/2017	15.32 €	1.49%	0.30%	0.70%	1.89%	-0.40%	1.62%	-0.25	19.52%
8/2/2017	15.14 €	-1.14%	-0.04%	-0.21%	-0.39%	-0.76%	1.62%	-0.47	35.94%
8/3/2017	15.28 €	0.92%	0.12%	-0.61%	-0.60%	1.53%	1.62%	0.94	65.39%
8/4/2017	15.64 €	2.36%	-0.09%	1.51%	2.23%	0.13%	1.60%	0.08	6.22%
8/7/2017	15.47 €	-1.09%	0.14%	-0.56%	-0.48%	-0.60%	1.60%	-0.38	29.25%
8/8/2017	15.47 €	-0.03%	0.11%	0.52%	1.16%	-1.19%	1.60%	-0.74	54.12%
8/9/2017	14.88 €	-3.78%	-0.65%	-1.15%	-3.37%	-0.41%	1.60%	-0.26	20.45%
8/10/2017	14.42 €	-3.09%	-0.62%	-0.30%	-1.99%	-1.11%	1.60%	-0.69	51.09%
8/11/2017	14.22 €	-1.39%	-0.47%	-0.85%	-2.53%	1.14%	1.57%	0.73	53.20%
8/14/2017	14.66 €	3.09%	0.74%	0.27%	2.31%	0.78%	1.58%	0.50	37.97%
8/15/2017	14.58 €	-0.55%	-0.14%	0.05%	-0.25%	-0.29%	1.57%	-0.19	14.72%
8/16/2017	14.58 €	0.00%	0.29%	-0.52%	-0.08%	0.08%	1.57%	0.05	3.90%
8/17/2017	14.11 €	-3.22%	-0.41%	-0.90%	-2.49%	-0.73%	1.57%	-0.47	35.85%
8/18/2017	14.10 €	-0.07%	-0.79%	0.57%	-1.06%	0.99%	1.56%	0.63	47.33%
8/21/2017	13.76 €	-2.41%	-0.07%	-1.12%	-1.96%	-0.45%	1.56%	-0.29	22.69%
8/22/2017	13.74 €	-0.15%	0.62%	-0.05%	1.51%	-1.65%	1.56%	-1.06	70.96%
8/23/2017	13.80 €	0.44%	0.03%	0.24%	0.49%	-0.05%	1.56%	-0.03	2.47%
8/24/2017	13.81 €	0.04%	-0.22%	0.07%	-0.40%	0.44%	1.56%	0.28	22.08%
8/25/2017	13.80 €	-0.07%	0.33%	-0.11%	0.64%	-0.72%	1.56%	-0.46	35.35%
8/28/2017	13.71 €	-0.62%	0.02%	-0.70%	-1.09%	0.48%	1.56%	0.31	23.95%
8/29/2017	13.31 €	-2.95%	-0.21%	-0.36%	-1.09%	-1.86%	1.56%	-1.20	76.80%
8/30/2017	13.45 €	1.09%	0.18%	0.58%	1.39%	-0.30%	1.56%	-0.19	15.22%
8/31/2017	13.47 €	0.15%	0.58%	-0.98%	-0.15%	0.30%	1.55%	0.19	15.41%
9/1/2017	13.54 €	0.48%	0.48%	0.14%	1.40%	-0.91%	1.54%	-0.59	44.58%
9/5/2017	13.22 €	-2.36%	-0.46%	-1.69%	-3.90%	1.54%	1.54%	1.00	67.96%
9/6/2017	13.42 €	1.51%	0.06%	-0.12%	-0.08%	1.59%	1.54%	1.03	69.54%
9/7/2017	13.26 €	-1.19%	0.35%	-1.98%	-2.26%	1.07%	1.55%	0.69	50.92%
9/8/2017	13.34 €	0.64%	0.09%	0.76%	1.41%	-0.77%	1.55%	-0.50	38.18%
9/11/2017	13.71 €	2.77%	0.63%	0.20%	1.99%	0.78%	1.52%	0.52	39.36%
9/12/2017	14.20 €	3.57%	0.37%	1.21%	2.82%	0.75%	1.52%	0.50	37.98%
9/13/2017	14.14 €	-0.42%	-0.14%	0.52%	0.32%	-0.75%	1.52%	-0.49	37.65%
9/14/2017	14.05 €	-0.67%	0.05%	0.00%	0.09%	-0.76%	1.52%	-0.50	38.27%
9/15/2017	13.81 €	-1.67%	0.04%	-0.35%	-0.50%	-1.18%	1.51%	-0.78	56.20%
9/18/2017	13.86 €	0.33%	0.29%	0.83%	2.02%	-1.69%	1.47%	-1.15	74.74%
9/19/2017	13.80 €	-0.40%	0.20%	0.38%	1.07%	-1.47%	1.48%	-1.00	67.93%
9/20/2017	13.57 €	-1.67%	0.13%	-0.13%	0.14%	-1.81%	1.45%	-1.25	78.59%
9/21/2017	13.94 €	2.69%	-0.25%	1.13%	0.96%	1.73%	1.45%	1.19	76.63%
9/22/2017	13.90 €	-0.25%	-0.02%	-0.34%	-0.57%	0.31%	1.45%	0.22	17.16%
9/25/2017	13.67 €	-1.69%	-0.25%	-0.60%	-1.61%	-0.08%	1.44%	-0.06	4.53%
9/26/2017	13.63 €	-0.29%	-0.20%	-0.05%	-0.64%	0.34%	1.44%	0.24	18.93%
9/27/2017	14.00 €	2.72%	0.07%	1.53%	2.53%	0.18%	1.41%	0.13	10.23%
9/28/2017	14.37 €	2.68%	0.31%	-0.16%	0.63%	2.05%	1.41%	1.45	85.16%
9/29/2017	14.63 €	1.81%	0.34%	-0.32%	0.48%	1.33%	1.41%	0.94	65.18%
10/2/2017	14.49 €	-0.96%	0.22%	-0.01%	0.59%	-1.54%	1.36%	-1.14	74.33%
10/4/2017	14.35 €	-0.97%	0.40%	0.07%	1.20%	-2.17%	1.36%	-1.60	88.85%
10/5/2017	14.70 €	2.44%	0.11%	-0.04%	0.24%	2.20%	1.36%	1.61	89.22%
10/6/2017	14.72 €	0.14%	-0.02%	0.17%	0.17%	-0.04%	1.37%	-0.03	2.06%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
10/9/2017	14.38 €	-2.34%	0.15%	-0.61%	-0.53%	-1.81%	1.37%	-1.32	81.14%
10/10/2017	14.31 €	-0.49%	0.21%	-0.36%	0.01%	-0.50%	1.38%	-0.36	28.35%
10/11/2017	14.32 €	0.10%	0.16%	-0.33%	-0.09%	0.19%	1.37%	0.14	11.28%
10/12/2017	14.17 €	-1.05%	0.13%	-1.45%	-1.89%	0.84%	1.37%	0.61	45.86%
10/13/2017	14.00 €	-1.24%	0.21%	-0.47%	-0.19%	-1.05%	1.37%	-0.76	55.36%
10/16/2017	14.12 €	0.86%	0.02%	0.79%	1.19%	-0.34%	1.37%	-0.25	19.35%
10/17/2017	14.25 €	0.96%	-0.15%	0.29%	-0.04%	1.00%	1.37%	0.73	53.31%
10/18/2017	14.38 €	0.91%	0.16%	0.46%	1.09%	-0.18%	1.37%	-0.13	10.29%
10/19/2017	14.18 €	-1.39%	-0.04%	-0.59%	-1.07%	-0.32%	1.37%	-0.23	18.23%
10/20/2017	14.40 €	1.55%	0.15%	1.50%	2.63%	-1.07%	1.37%	-0.78	56.61%
10/23/2017	14.24 €	-1.15%	0.05%	-0.06%	-0.03%	-1.11%	1.36%	-0.82	58.82%
10/24/2017	14.66 €	2.99%	-0.08%	1.01%	1.19%	1.79%	1.35%	1.32	81.35%
10/25/2017	14.54 €	-0.85%	-0.51%	0.39%	-0.94%	0.09%	1.36%	0.07	5.40%
10/26/2017	14.40 €	-0.93%	0.29%	0.02%	0.76%	-1.69%	1.36%	-1.25	78.63%
10/27/2017	14.16 €	-1.67%	0.29%	-0.84%	-0.53%	-1.14%	1.36%	-0.84	59.77%
10/30/2017	13.95 €	-1.48%	0.07%	-0.64%	-0.84%	-0.64%	1.36%	-0.47	36.12%
11/1/2017	14.17 €	1.58%	0.37%	-1.09%	-0.72%	2.29%	1.36%	1.68	90.65%
11/2/2017	14.64 €	3.28%	-0.06%	0.73%	0.84%	2.44%	1.36%	1.79	92.59%
11/3/2017	14.51 €	-0.85%	0.11%	-0.83%	-1.01%	0.15%	1.37%	0.11	8.81%
11/6/2017	14.51 €	0.00%	0.21%	-0.93%	-0.89%	0.89%	1.37%	0.65	48.30%
11/7/2017	14.53 €	0.14%	-0.04%	-0.48%	-0.91%	1.05%	1.37%	0.76	55.42%
11/8/2017	14.74 €	1.45%	0.07%	-1.70%	-2.40%	3.85%	1.37%	2.81	99.46%
11/9/2017	14.99 €	1.70%	-0.33%	0.55%	-0.14%	1.83%	1.39%	1.32	81.08%
11/10/2017	15.46 €	3.14%	-0.20%	0.82%	0.63%	2.51%	1.40%	1.79	92.59%
11/13/2017	15.37 €	-0.58%	-0.15%	-0.72%	-1.53%	0.95%	1.38%	0.69	50.65%
11/14/2017	15.47 €	0.62%	-0.10%	-0.32%	-0.79%	1.41%	1.38%	1.02	69.22%
11/15/2017	15.76 €	1.91%	-0.41%	1.60%	1.17%	0.74%	1.38%	0.53	40.68%
11/16/2017	16.18 €	2.63%	0.52%	-0.62%	0.35%	2.28%	1.38%	1.65	89.98%
11/17/2017	16.23 €	0.31%	0.01%	-0.29%	-0.48%	0.78%	1.39%	0.56	42.71%
11/20/2017	16.35 €	0.77%	0.00%	0.28%	0.35%	0.42%	1.39%	0.30	23.57%
11/21/2017	16.24 €	-0.70%	0.65%	-0.68%	0.64%	-1.35%	1.38%	-0.98	66.95%
11/22/2017	16.03 €	-1.26%	0.10%	0.13%	0.38%	-1.65%	1.39%	-1.19	76.45%
11/24/2017	16.05 €	0.12%	0.47%	-0.61%	0.24%	-0.11%	1.39%	-0.08	6.49%
11/27/2017	15.71 €	-2.12%	-0.22%	-0.06%	-0.74%	-1.37%	1.39%	-0.99	67.73%
11/28/2017	15.70 €	-0.06%	0.31%	0.36%	1.26%	-1.32%	1.39%	-0.95	65.79%
11/29/2017	16.07 €	2.36%	0.24%	3.28%	5.43%	-3.07%	1.39%	-2.21	97.21%
11/30/2017	15.86 €	-1.31%	0.36%	-0.20%	0.60%	-1.90%	1.40%	-1.36	82.41%
12/1/2017	15.78 €	-0.54%	-0.44%	-0.42%	-1.84%	1.30%	1.41%	0.92	64.35%
12/4/2017	16.14 €	2.31%	0.66%	1.37%	3.62%	-1.31%	1.41%	-0.93	64.53%
12/5/2017	15.96 €	-1.15%	-0.32%	0.34%	-0.45%	-0.70%	1.41%	-0.50	38.00%
12/6/2017	15.71 €	-1.54%	-0.63%	-0.30%	-2.16%	0.63%	1.41%	0.44	34.31%
12/7/2017	15.97 €	1.62%	0.31%	-0.76%	-0.39%	2.01%	1.37%	1.46	85.54%
12/8/2017	16.49 €	3.29%	0.31%	0.34%	1.12%	2.17%	1.37%	1.59	88.59%
12/11/2017	16.34 €	-0.91%	0.37%	0.20%	1.11%	-2.02%	1.37%	-1.48	85.91%
12/12/2017	16.52 €	1.10%	0.27%	0.30%	0.99%	0.11%	1.37%	0.08	6.64%
12/13/2017	16.52 €	0.00%	0.16%	0.21%	0.59%	-0.59%	1.37%	-0.43	33.21%
12/14/2017	16.37 €	-0.94%	-0.17%	-0.76%	-1.59%	0.65%	1.37%	0.48	36.74%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
12/15/2017	16.54 €	1.07%	0.01%	-0.12%	-0.24%	1.31%	1.36%	0.96	66.11%
12/18/2017	17.10 €	3.39%	0.98%	-0.42%	1.96%	1.43%	1.34%	1.07	71.21%
12/19/2017	16.81 €	-1.73%	-0.28%	0.16%	-0.71%	-1.02%	1.34%	-0.76	55.10%
12/20/2017	16.64 €	-0.98%	-0.12%	0.38%	0.04%	-1.02%	1.33%	-0.77	55.59%
12/21/2017	16.52 €	-0.72%	0.33%	0.34%	1.22%	-1.94%	1.33%	-1.46	85.49%
12/22/2017	16.32 €	-1.24%	-0.26%	-0.14%	-1.06%	-0.18%	1.33%	-0.13	10.73%
12/27/2017	16.07 €	-1.50%	0.28%	-0.57%	-0.11%	-1.39%	1.33%	-1.05	70.29%
12/28/2017	15.94 €	-0.81%	0.05%	0.20%	0.24%	-1.05%	1.33%	-0.79	56.97%
1/2/2018	15.96 €	0.11%	0.32%	-0.59%	-0.04%	0.16%	1.33%	0.12	9.36%
1/3/2018	15.91 €	-0.30%	0.56%	-0.35%	0.92%	-1.22%	1.33%	-0.92	64.06%
1/4/2018	16.33 €	2.65%	0.87%	-0.20%	1.95%	0.70%	1.33%	0.53	40.21%
1/5/2018	15.49 €	-5.16%	0.48%	-1.05%	-0.25%	-4.91%	1.33%	-3.69	99.97%
1/8/2018	15.34 €	-0.97%	0.16%	-0.21%	-0.05%	-0.92%	1.37%	-0.67	49.63%
1/9/2018	15.11 €	-1.50%	0.36%	0.23%	1.07%	-2.57%	1.37%	-1.88	93.82%
1/10/2018	15.56 €	2.96%	-0.14%	1.61%	1.60%	1.36%	1.38%	0.99	67.70%
1/11/2018	15.35 €	-1.35%	0.34%	-0.62%	-0.12%	-1.23%	1.37%	-0.90	63.07%
1/12/2018	15.29 €	-0.40%	0.68%	0.07%	1.69%	-2.10%	1.36%	-1.55	87.67%
1/16/2018	15.23 €	-0.38%	0.68%	0.04%	1.59%	-1.97%	1.35%	-1.47	85.61%
1/17/2018	15.10 €	-0.84%	-0.20%	-0.52%	-1.39%	0.55%	1.35%	0.41	31.51%
1/18/2018	15.18 €	0.53%	0.15%	0.85%	1.31%	-0.78%	1.35%	-0.58	43.72%
1/19/2018	15.33 €	1.01%	0.32%	-0.23%	0.32%	0.70%	1.34%	0.52	39.55%
1/22/2018	15.78 €	2.93%	0.46%	-0.26%	0.60%	2.33%	1.34%	1.73	91.59%
1/23/2018	15.88 €	0.60%	0.70%	-0.32%	1.16%	-0.57%	1.35%	-0.42	32.67%
1/24/2018	15.88 €	0.03%	0.12%	0.18%	0.36%	-0.33%	1.35%	-0.25	19.48%
1/25/2018	15.80 €	-0.52%	0.18%	0.35%	0.71%	-1.22%	1.35%	-0.91	63.45%
1/26/2018	15.65 €	-0.95%	0.18%	-0.50%	-0.45%	-0.50%	1.33%	-0.38	29.30%
1/29/2018	15.49 €	-1.05%	-0.14%	0.66%	0.35%	-1.39%	1.34%	-1.04	70.20%
1/30/2018	14.79 €	-4.47%	-0.91%	0.04%	-2.34%	-2.13%	1.34%	-1.60	88.81%
1/31/2018	14.79 €	0.00%	-0.13%	0.25%	-0.21%	0.21%	1.34%	0.16	12.50%
2/1/2018	14.77 €	-0.14%	0.08%	0.21%	0.25%	-0.39%	1.34%	-0.29	22.73%
2/2/2018	13.86 €	-6.21%	-1.27%	1.66%	-1.11%	-5.11%	1.33%	-3.84	99.98%
2/5/2018	13.65 €	-1.47%	-1.62%	0.15%	-3.87%	2.40%	1.33%	1.80	92.72%
2/6/2018	13.17 €	-3.55%	-3.84%	0.95%	-7.59%	4.05%	1.34%	3.03	99.72%
2/7/2018	13.11 €	-0.44%	2.28%	0.52%	4.66%	-5.10%	1.35%	-3.77	99.98%
2/8/2018	12.80 €	-2.36%	-1.79%	0.78%	-2.06%	-0.30%	1.39%	-0.22	17.14%
2/9/2018	12.51 €	-2.23%	-2.10%	0.66%	-2.67%	0.44%	1.39%	0.31	24.67%
2/12/2018	13.02 €	4.03%	1.76%	-0.47%	2.02%	2.01%	1.39%	1.45	85.16%
2/13/2018	12.82 €	-1.52%	0.12%	0.36%	0.52%	-2.04%	1.39%	-1.47	85.65%
2/14/2018	12.93 €	0.87%	1.10%	0.42%	2.16%	-1.29%	1.40%	-0.92	64.38%
2/15/2018	12.87 €	-0.46%	1.09%	-0.37%	1.10%	-1.57%	1.40%	-1.12	73.61%
2/16/2018	12.92 €	0.39%	1.17%	-0.98%	0.36%	0.03%	1.40%	0.02	1.47%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
2/20/2018	13.39 €	3.65%	-0.47%	-0.20%	-1.14%	4.79%	1.40%	3.42	99.93%
2/21/2018	13.58 €	1.40%	0.00%	0.80%	0.90%	0.50%	1.43%	0.35	27.49%
2/22/2018	13.45 €	-0.99%	-0.25%	-0.09%	-0.63%	-0.36%	1.42%	-0.25	19.91%
2/23/2018	13.30 €	-1.13%	0.11%	-0.54%	-0.68%	-0.45%	1.42%	-0.32	24.89%
2/26/2018	13.31 €	0.14%	1.09%	-0.82%	0.40%	-0.26%	1.42%	-0.19	14.68%
2/27/2018	13.45 €	1.05%	-0.10%	0.91%	0.90%	0.15%	1.42%	0.11	8.50%
2/28/2018	13.20 €	-1.89%	-0.86%	0.20%	-1.13%	-0.76%	1.42%	-0.54	40.76%
3/1/2018	12.95 €	-1.89%	-1.26%	0.39%	-1.48%	-0.42%	1.42%	-0.29	23.00%
3/2/2018	12.55 €	-3.09%	-1.40%	-1.13%	-3.60%	0.51%	1.42%	0.36	28.12%
3/5/2018	12.82 €	2.18%	1.20%	-0.05%	1.48%	0.70%	1.41%	0.49	37.86%
3/6/2018	12.86 €	0.30%	0.45%	-0.36%	0.01%	0.29%	1.41%	0.20	16.10%
3/7/2018	13.18 €	2.44%	0.03%	-0.24%	-0.39%	2.83%	1.35%	2.09	96.25%
3/8/2018	13.10 €	-0.58%	0.40%	-0.63%	-0.33%	-0.25%	1.36%	-0.18	14.35%
3/9/2018	13.04 €	-0.47%	1.00%	0.62%	2.05%	-2.53%	1.36%	-1.86	93.58%
3/12/2018	13.06 €	0.17%	0.59%	-0.46%	0.11%	0.06%	1.36%	0.04	3.51%
3/13/2018	12.83 €	-1.79%	-0.18%	-0.20%	-0.65%	-1.14%	1.36%	-0.84	59.87%
3/14/2018	12.71 €	-0.90%	-0.55%	-0.78%	-1.89%	0.98%	1.36%	0.72	52.91%
3/15/2018	12.77 €	0.50%	-0.14%	0.39%	0.14%	0.36%	1.36%	0.27	21.01%
3/16/2018	12.84 €	0.53%	0.07%	0.71%	0.83%	-0.29%	1.36%	-0.22	17.03%
3/19/2018	12.55 €	-2.27%	-1.31%	0.34%	-1.55%	-0.72%	1.36%	-0.53	40.36%
3/20/2018	12.66 €	0.88%	0.10%	0.33%	0.40%	0.47%	1.36%	0.35	27.22%
3/21/2018	12.01 €	-5.15%	0.27%	-0.43%	-0.27%	-4.88%	1.35%	-3.61	99.96%
3/22/2018	11.65 €	-2.98%	-1.25%	-0.99%	-2.95%	-0.03%	1.36%	-0.02	1.88%
3/23/2018	11.32 €	-2.85%	-1.60%	-0.71%	-3.10%	0.25%	1.36%	0.19	14.78%
3/26/2018	11.19 €	-1.17%	-0.42%	0.64%	0.08%	-1.25%	1.36%	-0.92	64.06%
3/27/2018	11.31 €	1.14%	1.63%	-0.65%	1.33%	-0.19%	1.36%	-0.14	10.96%
3/28/2018	11.20 €	-1.04%	-1.62%	-0.05%	-2.35%	1.30%	1.36%	0.96	66.14%
3/29/2018	11.33 €	1.16%	0.59%	-0.60%	-0.06%	1.22%	1.36%	0.90	62.92%
4/3/2018	11.16 €	-1.45%	-1.01%	0.59%	-0.75%	-0.69%	1.36%	-0.51	38.99%
4/4/2018	11.17 €	0.05%	0.18%	-0.19%	-0.10%	0.15%	1.36%	0.11	8.97%
4/5/2018	11.66 €	4.41%	2.02%	0.41%	2.98%	1.43%	1.36%	1.05	70.65%
4/6/2018	11.35 €	-2.64%	-0.76%	-0.42%	-1.61%	-1.03%	1.36%	-0.75	54.87%
4/9/2018	11.48 €	1.16%	0.28%	0.55%	0.92%	0.24%	1.36%	0.18	14.21%
4/10/2018	11.43 €	-0.45%	0.81%	-0.05%	0.93%	-1.39%	1.36%	-1.02	69.10%
4/11/2018	11.49 €	0.51%	-0.21%	-0.84%	-1.40%	1.90%	1.36%	1.40	83.60%
4/12/2018	11.67 €	1.55%	0.28%	1.14%	1.60%	-0.05%	1.37%	-0.04	2.92%
4/13/2018	11.70 €	0.27%	-0.09%	-1.19%	-1.60%	1.88%	1.37%	1.37	82.87%
4/16/2018	11.60 €	-0.85%	0.35%	-1.10%	-0.89%	0.04%	1.37%	0.03	2.15%
4/17/2018	11.66 €	0.53%	0.88%	-0.18%	0.87%	-0.33%	1.37%	-0.24	19.15%
4/18/2018	11.73 €	0.55%	0.51%	-1.24%	-0.84%	1.39%	1.37%	1.02	69.06%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
4/19/2018	11.69 €	-0.34%	-0.62%	1.60%	0.90%	-1.24%	1.37%	-0.91	63.46%
4/20/2018	11.57 €	-0.96%	-0.55%	1.31%	0.63%	-1.59%	1.37%	-1.16	75.23%
4/23/2018	11.69 €	0.97%	-0.06%	-0.17%	-0.38%	1.34%	1.37%	0.98	67.17%
4/24/2018	12.18 €	4.21%	-0.13%	0.74%	0.54%	3.67%	1.37%	2.68	99.20%
4/25/2018	11.99 €	-1.54%	-1.27%	-0.34%	-2.00%	0.46%	1.34%	0.34	26.75%
4/26/2018	11.83 €	-1.30%	0.75%	-0.64%	0.10%	-1.40%	1.34%	-1.05	70.53%
4/27/2018	11.44 €	-3.36%	0.41%	-0.65%	-0.33%	-3.04%	1.33%	-2.29	97.69%
4/30/2018	11.37 €	-0.61%	0.02%	0.36%	0.29%	-0.90%	1.34%	-0.67	49.62%
5/2/2018	11.44 €	0.65%	-0.58%	-0.21%	-1.05%	1.70%	1.34%	1.27	79.37%
5/3/2018	11.31 €	-1.10%	-1.25%	-1.32%	-3.04%	1.94%	1.34%	1.45	85.06%
5/4/2018	11.52 €	1.82%	1.32%	-0.57%	0.80%	1.02%	1.35%	0.76	55.19%
5/7/2018	11.53 €	0.05%	0.67%	-0.43%	0.19%	-0.13%	1.35%	-0.10	7.89%
5/8/2018	11.45 €	-0.62%	-0.29%	1.49%	1.11%	-1.74%	1.34%	-1.30	80.35%
5/9/2018	11.54 €	0.75%	0.36%	0.94%	1.27%	-0.52%	1.35%	-0.38	29.79%
5/10/2018	11.60 €	0.55%	1.00%	-0.05%	0.98%	-0.42%	1.35%	-0.31	24.67%
5/11/2018	11.64 €	0.34%	0.43%	-0.29%	0.05%	0.29%	1.35%	0.22	17.07%
5/14/2018	11.47 €	-1.49%	0.38%	-0.19%	0.10%	-1.60%	1.35%	-1.18	76.24%
5/15/2018	11.28 €	-1.66%	-0.85%	0.91%	-0.17%	-1.49%	1.35%	-1.10	72.83%
5/16/2018	10.98 €	-2.68%	-0.08%	-0.67%	-0.95%	-1.73%	1.35%	-1.28	79.84%
5/17/2018	11.02 €	0.42%	0.43%	-0.73%	-0.43%	0.85%	1.35%	0.63	47.14%
5/18/2018	10.81 €	-1.94%	-0.28%	-0.91%	-1.42%	-0.53%	1.35%	-0.39	30.15%
5/22/2018	10.96 €	1.42%	0.68%	0.82%	1.46%	-0.03%	1.36%	-0.02	1.79%
5/23/2018	10.90 €	-0.60%	-1.07%	-0.69%	-2.10%	1.50%	1.36%	1.11	73.03%
5/24/2018	10.38 €	-4.79%	-0.05%	-0.79%	-1.04%	-3.75%	1.36%	-2.76	99.37%
5/25/2018	10.38 €	0.08%	0.00%	-0.05%	-0.23%	0.31%	1.38%	0.22	17.50%
5/29/2018	9.82 €	-5.46%	-1.30%	-1.92%	-3.67%	-1.79%	1.38%	-1.30	80.45%
5/30/2018	9.86 €	0.46%	0.62%	-0.54%	-0.03%	0.49%	1.38%	0.35	27.60%
5/31/2018	9.16 €	-7.15%	0.03%	-0.93%	-1.15%	-6.00%	1.38%	-4.36	100.00%
6/1/2018	9.41 €	2.76%	0.43%	0.75%	1.14%	1.62%	1.43%	1.14	74.25%
6/4/2018	9.53 €	1.32%	0.51%	-0.51%	-0.14%	1.46%	1.44%	1.01	68.80%
6/5/2018	9.42 €	-1.20%	-0.05%	-1.02%	-1.36%	0.17%	1.44%	0.12	9.25%
6/6/2018	9.56 €	1.46%	0.55%	1.18%	1.79%	-0.33%	1.43%	-0.23	18.16%
6/7/2018	9.62 €	0.64%	0.47%	0.52%	0.98%	-0.34%	1.43%	-0.24	18.86%
6/8/2018	9.55 €	-0.68%	-0.39%	-0.49%	-1.19%	0.51%	1.43%	0.36	27.99%
6/11/2018	9.68 €	1.29%	0.67%	0.09%	0.73%	0.56%	1.43%	0.39	30.10%
6/12/2018	9.72 €	0.44%	0.01%	-0.02%	-0.19%	0.64%	1.43%	0.44	34.30%
6/13/2018	9.66 €	-0.67%	0.12%	-1.04%	-1.18%	0.51%	1.43%	0.36	27.78%
6/14/2018	9.66 €	0.02%	-0.30%	-0.52%	-1.12%	1.14%	1.43%	0.80	57.28%
6/15/2018	9.49 €	-1.71%	-0.58%	-0.75%	-1.70%	-0.01%	1.43%	-0.01	0.55%
6/18/2018	9.48 €	-0.12%	-0.29%	0.75%	0.33%	-0.45%	1.43%	-0.31	24.57%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
6/19/2018	9.56 €	0.83%	-0.68%	0.40%	-0.54%	1.37%	1.43%	0.96	66.40%
6/20/2018	9.59 €	0.30%	0.48%	0.07%	0.49%	-0.19%	1.42%	-0.13	10.57%
6/21/2018	9.38 €	-2.20%	-0.44%	-0.29%	-1.01%	-1.19%	1.42%	-0.83	59.40%
6/22/2018	9.49 €	1.24%	0.36%	0.40%	0.71%	0.52%	1.43%	0.37	28.64%
6/25/2018	9.26 €	-2.48%	-1.61%	-0.72%	-2.90%	0.42%	1.43%	0.30	23.30%
6/26/2018	9.21 €	-0.55%	0.25%	-0.35%	-0.25%	-0.30%	1.43%	-0.21	16.66%
6/27/2018	9.05 €	-1.69%	0.17%	0.41%	0.51%	-2.21%	1.42%	-1.55	87.71%
6/28/2018	9.06 €	0.11%	-0.76%	0.81%	-0.21%	0.32%	1.43%	0.22	17.54%
6/29/2018	9.22 €	1.77%	1.11%	0.02%	1.17%	0.60%	1.43%	0.42	32.52%
7/2/2018	9.14 €	-0.90%	-1.23%	-0.75%	-2.52%	1.62%	1.42%	1.14	74.29%
7/3/2018	9.25 €	1.16%	0.84%	-0.69%	0.04%	1.12%	1.42%	0.79	56.88%
7/5/2018	9.52 €	3.00%	0.00%	0.06%	-0.13%	3.13%	1.42%	2.20	97.09%
7/6/2018	9.76 €	2.51%	1.06%	-0.97%	0.00%	2.51%	1.43%	1.75	91.91%
7/9/2018	9.79 €	0.32%	0.73%	0.96%	1.72%	-1.40%	1.44%	-0.97	66.84%
7/10/2018	9.74 €	-0.53%	0.34%	-0.38%	-0.18%	-0.35%	1.44%	-0.24	18.97%
7/11/2018	9.57 €	-1.70%	-0.78%	0.28%	-0.84%	-0.86%	1.44%	-0.60	45.09%
7/12/2018	9.56 €	-0.15%	0.37%	-0.54%	-0.32%	0.18%	1.44%	0.12	9.83%
7/13/2018	9.61 €	0.49%	0.41%	-0.82%	-0.55%	1.04%	1.44%	0.73	53.11%
7/16/2018	10.31 €	7.28%	-0.14%	2.07%	1.79%	5.48%	1.44%	3.80	99.98%
7/17/2018	10.17 €	-1.36%	0.14%	0.95%	1.09%	-2.45%	1.48%	-1.65	90.03%
7/18/2018	10.35 €	1.83%	0.27%	0.09%	0.27%	1.56%	1.49%	1.05	70.44%
7/19/2018	10.31 €	-0.39%	-0.24%	-0.51%	-1.00%	0.61%	1.49%	0.41	31.81%
7/20/2018	10.26 €	-0.54%	0.30%	0.10%	0.33%	-0.87%	1.49%	-0.58	44.08%
7/23/2018	10.35 €	0.96%	-0.23%	1.80%	1.55%	-0.60%	1.50%	-0.40	31.05%
7/24/2018	10.45 €	0.97%	0.70%	0.45%	1.21%	-0.24%	1.49%	-0.16	12.83%
7/25/2018	10.31 €	-1.38%	-0.10%	-0.44%	-0.75%	-0.63%	1.49%	-0.42	32.74%
7/26/2018	10.52 €	2.00%	0.62%	0.15%	0.76%	1.24%	1.49%	0.83	59.34%
7/27/2018	10.63 €	1.07%	-0.02%	0.27%	0.11%	0.96%	1.49%	0.64	47.86%
7/30/2018	10.94 €	2.90%	-0.57%	1.45%	0.72%	2.17%	1.49%	1.46	85.38%
7/31/2018	11.19 €	2.30%	0.12%	-0.39%	-0.43%	2.73%	1.49%	1.83	93.13%
8/1/2018	11.09 €	-0.86%	-0.12%	0.07%	-0.18%	-0.68%	1.50%	-0.45	34.92%
8/2/2018	10.73 €	-3.28%	-0.43%	-0.50%	-1.20%	-2.08%	1.50%	-1.39	83.50%
8/3/2018	10.76 €	0.34%	0.47%	0.27%	0.74%	-0.41%	1.50%	-0.27	21.30%
8/6/2018	10.77 €	0.04%	0.16%	-0.41%	-0.40%	0.44%	1.50%	0.29	23.04%
8/7/2018	10.94 €	1.56%	0.60%	0.17%	0.77%	0.79%	1.50%	0.53	40.08%
8/8/2018	10.78 €	-1.46%	-0.04%	0.24%	0.08%	-1.54%	1.50%	-1.03	69.45%
8/9/2018	10.74 €	-0.32%	-0.05%	-0.58%	-0.84%	0.52%	1.50%	0.35	27.31%
8/10/2018	10.31 €	-4.06%	-1.09%	-0.16%	-1.62%	-2.44%	1.50%	-1.63	89.48%
8/13/2018	10.10 €	-2.04%	-0.48%	-0.27%	-1.02%	-1.02%	1.50%	-0.68	50.22%
8/14/2018	10.04 €	-0.52%	0.18%	-0.73%	-0.71%	0.20%	1.50%	0.13	10.37%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
8/15/2018	9.79 €	-2.51%	-1.12%	0.28%	-1.19%	-1.32%	1.50%	-0.88	61.99%
8/16/2018	9.88 €	0.93%	1.00%	-0.29%	0.75%	0.18%	1.50%	0.12	9.44%
8/17/2018	9.76 €	-1.26%	0.03%	-0.55%	-0.71%	-0.56%	1.50%	-0.37	28.93%
8/20/2018	9.77 €	0.09%	0.50%	0.03%	0.49%	-0.40%	1.50%	-0.27	20.97%
8/21/2018	9.92 €	1.56%	0.48%	0.50%	0.97%	0.59%	1.50%	0.39	30.51%
8/22/2018	9.97 €	0.47%	0.13%	-0.47%	-0.48%	0.95%	1.49%	0.64	47.49%
8/23/2018	9.84 €	-1.25%	-0.46%	-0.17%	-0.87%	-0.39%	1.49%	-0.26	20.35%
8/24/2018	9.82 €	-0.25%	0.63%	-0.45%	0.15%	-0.41%	1.50%	-0.27	21.44%
8/27/2018	10.01 €	2.02%	0.79%	0.55%	1.41%	0.61%	1.50%	0.41	31.62%
8/28/2018	9.86 €	-1.53%	0.18%	-0.57%	-0.53%	-1.00%	1.50%	-0.67	49.66%
8/29/2018	9.97 €	1.12%	0.36%	-0.41%	-0.14%	1.25%	1.50%	0.84	59.58%
8/30/2018	9.81 €	-1.66%	-0.36%	-0.34%	-0.92%	-0.75%	1.49%	-0.50	38.21%
8/31/2018	9.70 €	-1.05%	-0.42%	-0.72%	-1.41%	0.36%	1.49%	0.24	18.99%
9/4/2018	9.84 €	1.41%	-0.51%	1.29%	0.61%	0.80%	1.50%	0.53	40.56%
9/5/2018	9.87 €	0.33%	-0.62%	0.80%	-0.02%	0.35%	1.49%	0.23	18.27%
9/6/2018	9.76 €	-1.08%	-0.36%	-0.35%	-0.92%	-0.17%	1.49%	-0.11	8.82%
9/7/2018	9.62 €	-1.45%	0.04%	-0.28%	-0.37%	-1.08%	1.49%	-0.73	53.10%
9/10/2018	9.58 €	-0.47%	0.08%	0.02%	0.00%	-0.47%	1.49%	-0.31	24.43%
9/11/2018	9.62 €	0.49%	0.03%	-0.47%	-0.60%	1.09%	1.49%	0.73	53.28%
9/12/2018	9.53 €	-0.97%	0.38%	-0.41%	-0.12%	-0.84%	1.49%	-0.57	42.81%
9/13/2018	9.72 €	1.98%	0.36%	-0.60%	-0.36%	2.35%	1.48%	1.58	88.45%
9/14/2018	9.78 €	0.65%	0.32%	0.01%	0.25%	0.40%	1.49%	0.27	20.97%
9/17/2018	9.86 €	0.78%	-0.14%	0.08%	-0.21%	0.99%	1.49%	0.66	49.26%
9/18/2018	9.91 €	0.56%	0.37%	-0.01%	0.29%	0.26%	1.49%	0.18	14.09%
9/19/2018	10.22 €	3.09%	0.32%	1.76%	2.11%	0.98%	1.49%	0.66	48.79%
9/20/2018	10.37 €	1.47%	0.65%	0.68%	1.39%	0.08%	1.49%	0.05	4.28%
9/21/2018	10.54 €	1.60%	0.35%	-0.33%	-0.04%	1.64%	1.49%	1.10	72.93%
9/24/2018	10.45 €	-0.85%	-0.46%	-0.15%	-0.82%	-0.03%	1.49%	-0.02	1.58%
9/25/2018	10.38 €	-0.61%	0.27%	-0.29%	-0.08%	-0.53%	1.48%	-0.36	27.77%
9/26/2018	10.24 €	-1.35%	0.00%	-0.39%	-0.52%	-0.82%	1.48%	-0.56	42.10%
9/27/2018	10.21 €	-0.29%	-0.26%	-0.63%	-1.10%	0.81%	1.48%	0.54	41.22%
9/28/2018	9.83 €	-3.76%	-0.21%	-1.44%	-1.87%	-1.89%	1.48%	-1.28	79.70%
10/1/2018	9.71 €	-1.17%	0.28%	-0.53%	-0.39%	-0.78%	1.48%	-0.53	40.17%
10/2/2018	9.61 €	-1.11%	-0.37%	-0.33%	-0.96%	-0.15%	1.48%	-0.10	8.22%
10/4/2018	9.75 €	1.54%	-0.93%	2.94%	1.84%	-0.30%	1.48%	-0.20	15.86%
10/5/2018	9.70 €	-0.50%	-0.52%	0.24%	-0.51%	0.01%	1.47%	0.00	0.38%
10/8/2018	9.55 €	-1.58%	-0.73%	-0.13%	-1.15%	-0.43%	1.47%	-0.29	22.84%
10/9/2018	9.61 €	0.62%	0.30%	0.03%	0.24%	0.38%	1.46%	0.26	20.59%
10/10/2018	9.58 €	-0.28%	-1.47%	1.34%	-0.48%	0.20%	1.46%	0.14	10.89%
10/11/2018	9.47 €	-1.17%	-2.59%	-0.37%	-3.55%	2.38%	1.46%	1.63	89.61%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
10/12/2018	9.40 €	-0.79%	0.12%	-1.07%	-1.11%	0.32%	1.47%	0.22	17.29%
10/15/2018	9.52 €	1.29%	0.19%	-0.35%	-0.27%	1.55%	1.47%	1.06	70.87%
10/16/2018	9.62 €	1.07%	0.89%	-0.94%	-0.09%	1.16%	1.47%	0.79	56.91%
10/17/2018	9.78 €	1.68%	0.02%	0.74%	0.68%	1.01%	1.47%	0.68	50.57%
10/18/2018	9.60 €	-1.88%	-0.51%	-0.22%	-0.92%	-0.97%	1.47%	-0.66	48.77%
10/19/2018	9.50 €	-1.04%	-0.17%	-0.18%	-0.50%	-0.54%	1.47%	-0.37	28.69%
10/22/2018	9.40 €	-1.07%	-0.63%	-0.70%	-1.56%	0.49%	1.48%	0.33	25.89%
10/23/2018	9.31 €	-0.88%	-1.80%	-0.36%	-2.55%	1.66%	1.47%	1.13	74.03%
10/24/2018	8.87 €	-4.76%	-0.24%	-0.79%	-1.20%	-3.56%	1.47%	-2.41	98.35%
10/25/2018	8.82 €	-0.55%	-0.47%	1.65%	1.01%	-1.56%	1.47%	-1.06	71.13%
10/26/2018	8.52 €	-3.40%	-1.20%	-0.11%	-1.59%	-1.81%	1.47%	-1.23	77.96%
10/29/2018	8.59 €	0.85%	0.58%	2.08%	2.58%	-1.74%	1.48%	-1.18	75.89%
10/30/2018	8.56 €	-0.43%	-0.24%	-0.90%	-1.28%	0.84%	1.48%	0.57	43.18%
10/31/2018	8.65 €	1.12%	1.92%	0.42%	2.48%	-1.36%	1.48%	-0.92	64.06%
11/1/2018	8.95 €	3.46%	0.50%	-0.01%	0.42%	3.03%	1.48%	2.05	95.89%
11/2/2018	9.19 €	2.69%	-0.21%	0.03%	-0.33%	3.02%	1.48%	2.04	95.71%
11/5/2018	9.18 €	-0.17%	0.22%	0.54%	0.64%	-0.82%	1.49%	-0.55	41.66%
11/6/2018	9.08 €	-1.00%	0.54%	-0.65%	-0.12%	-0.89%	1.49%	-0.60	44.80%
11/7/2018	9.19 €	1.12%	1.33%	-0.80%	0.62%	0.50%	1.49%	0.34	26.23%
11/8/2018	9.16 €	-0.32%	0.49%	1.40%	1.76%	-2.07%	1.49%	-1.39	83.57%
11/9/2018	8.96 €	-2.16%	-1.00%	-0.49%	-1.73%	-0.43%	1.48%	-0.29	22.80%
11/12/2018	8.67 €	-3.19%	-1.43%	-0.70%	-2.46%	-0.73%	1.47%	-0.50	38.20%
11/13/2018	8.82 €	1.71%	0.17%	1.01%	0.98%	0.72%	1.47%	0.49	37.83%
11/14/2018	8.73 €	-1.01%	-0.92%	-0.04%	-1.27%	0.26%	1.47%	0.18	14.01%
11/15/2018	8.61 €	-1.43%	-0.26%	0.15%	-0.33%	-1.10%	1.46%	-0.75	54.81%
11/16/2018	8.60 €	-0.05%	0.73%	-0.04%	0.63%	-0.68%	1.46%	-0.46	35.54%
11/19/2018	8.56 €	-0.44%	-0.59%	0.80%	-0.12%	-0.32%	1.46%	-0.22	17.58%
11/20/2018	8.15 €	-4.80%	-1.56%	-0.04%	-2.03%	-2.77%	1.45%	-1.90	94.18%
11/21/2018	8.32 €	2.01%	0.50%	0.48%	0.84%	1.17%	1.46%	0.80	57.43%
11/23/2018	8.17 €	-1.77%	-0.76%	-0.68%	-1.74%	-0.03%	1.47%	-0.02	1.36%
11/26/2018	8.56 €	4.79%	0.70%	1.28%	1.88%	2.91%	1.47%	1.99	95.18%
11/27/2018	8.66 €	1.13%	0.12%	-0.32%	-0.35%	1.48%	1.47%	1.00	68.37%
11/28/2018	8.59 €	-0.76%	0.52%	-0.39%	0.10%	-0.86%	1.47%	-0.58	43.93%
11/29/2018	8.30 €	-3.40%	1.38%	-1.10%	0.43%	-3.82%	1.47%	-2.59	98.99%
11/30/2018	8.06 €	-2.86%	-0.10%	-0.30%	-0.62%	-2.23%	1.49%	-1.50	86.41%
12/3/2018	8.32 €	3.21%	1.51%	-0.28%	1.27%	1.94%	1.50%	1.29	80.26%
12/4/2018	8.06 €	-3.15%	-0.64%	-1.50%	-2.53%	-0.61%	1.50%	-0.41	31.70%
12/6/2018	7.70 €	-4.49%	-4.39%	-0.52%	-5.98%	1.49%	1.50%	0.99	67.59%
12/7/2018	7.71 €	0.09%	0.99%	-1.11%	-0.22%	0.31%	1.51%	0.20	16.20%
12/10/2018	7.28 €	-5.55%	-2.12%	-0.73%	-3.42%	-2.13%	1.49%	-1.43	84.56%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
12/11/2018	7.43 €	2.10%	1.32%	-0.40%	0.90%	1.20%	1.50%	0.80	57.61%
12/12/2018	7.86 €	5.81%	1.24%	-0.96%	0.22%	5.59%	1.49%	3.74	99.98%
12/13/2018	7.86 €	-0.03%	-0.54%	0.21%	-0.66%	0.63%	1.54%	0.41	31.99%
12/14/2018	7.85 €	-0.15%	-1.25%	1.37%	-0.34%	0.19%	1.54%	0.12	9.85%
12/17/2018	7.66 €	-2.40%	-0.69%	0.24%	-0.79%	-1.60%	1.54%	-1.04	70.13%
12/18/2018	7.64 €	-0.21%	-1.11%	1.13%	-0.41%	0.20%	1.54%	0.13	10.29%
12/19/2018	7.53 €	-1.49%	0.24%	-0.15%	-0.08%	-1.41%	1.53%	-0.92	64.17%
12/20/2018	7.00 €	-7.04%	-2.69%	0.65%	-2.74%	-4.30%	1.53%	-2.81	99.46%
12/21/2018	7.04 €	0.60%	-0.50%	0.83%	-0.01%	0.61%	1.55%	0.39	30.64%
12/27/2018	6.75 €	-4.15%	-1.16%	-0.35%	-2.01%	-2.13%	1.55%	-1.37	82.92%
1/2/2019	7.15 €	5.91%	2.03%	0.79%	3.14%	2.77%	1.56%	1.78	92.29%
1/3/2019	7.10 €	-0.71%	-0.40%	-0.09%	-0.81%	0.10%	1.57%	0.06	4.84%
1/4/2019	7.44 €	4.76%	1.42%	0.71%	2.38%	2.38%	1.57%	1.52	86.92%
1/7/2019	7.55 €	1.55%	1.36%	-0.74%	0.89%	0.66%	1.55%	0.43	32.99%
1/8/2019	7.62 €	0.95%	0.30%	-0.97%	-0.75%	1.71%	1.54%	1.11	73.02%
1/9/2019	7.41 €	-2.77%	1.29%	-0.60%	0.96%	-3.73%	1.55%	-2.41	98.32%
1/10/2019	7.48 €	0.92%	0.07%	0.34%	0.27%	0.65%	1.56%	0.42	32.16%
1/11/2019	7.46 €	-0.32%	0.02%	0.07%	-0.09%	-0.23%	1.56%	-0.15	11.95%
1/14/2019	7.46 €	0.08%	-0.21%	1.34%	0.89%	-0.81%	1.55%	-0.52	39.77%
1/15/2019	7.49 €	0.32%	0.43%	-0.05%	0.35%	-0.03%	1.55%	-0.02	1.56%
1/16/2019	8.11 €	8.39%	0.60%	3.11%	3.71%	4.67%	1.55%	3.02	99.72%
1/17/2019	7.78 €	-4.09%	0.01%	-0.79%	-0.98%	-3.11%	1.57%	-1.98	95.09%
1/18/2019	8.00 €	2.78%	1.54%	0.19%	2.14%	0.63%	1.59%	0.40	30.96%
1/22/2019	7.86 €	-1.73%	-0.75%	-0.24%	-1.43%	-0.30%	1.59%	-0.19	14.88%
1/23/2019	7.97 €	1.44%	-0.39%	0.08%	-0.59%	2.03%	1.58%	1.28	79.89%
1/24/2019	7.82 €	-1.89%	0.28%	-0.11%	0.10%	-1.99%	1.59%	-1.26	79.00%
1/25/2019	8.13 €	3.95%	1.03%	0.09%	1.32%	2.63%	1.59%	1.65	89.99%
1/28/2019	8.06 €	-0.91%	-0.92%	0.71%	-0.57%	-0.34%	1.60%	-0.21	16.89%
1/29/2019	8.11 €	0.70%	0.26%	0.24%	0.49%	0.21%	1.60%	0.13	10.33%
1/30/2019	8.07 €	-0.59%	0.52%	-0.66%	-0.18%	-0.41%	1.60%	-0.26	20.14%
1/31/2019	7.75 €	-3.96%	1.31%	-3.43%	-2.29%	-1.67%	1.58%	-1.05	70.69%
2/1/2019	7.70 €	-0.59%	0.25%	0.50%	0.76%	-1.36%	1.59%	-0.85	60.61%
2/4/2019	7.66 €	-0.57%	-0.04%	-0.31%	-0.56%	-0.01%	1.59%	0.00	0.37%
2/5/2019	7.80 €	1.83%	0.92%	-0.67%	0.25%	1.58%	1.59%	0.99	67.87%
2/6/2019	7.89 €	1.24%	-0.05%	0.23%	0.06%	1.18%	1.59%	0.74	54.23%
2/7/2019	7.39 €	-6.33%	-1.29%	-0.58%	-2.57%	-3.77%	1.59%	-2.37	98.15%
2/8/2019	7.20 €	-2.64%	-0.59%	-0.24%	-1.28%	-1.36%	1.58%	-0.86	60.86%
2/11/2019	7.37 €	2.40%	0.56%	0.11%	0.78%	1.63%	1.58%	1.03	69.42%
2/12/2019	7.53 €	2.16%	1.13%	0.10%	1.59%	0.56%	1.58%	0.36	27.72%
2/13/2019	7.57 €	0.57%	0.35%	0.22%	0.61%	-0.04%	1.58%	-0.03	2.07%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
2/14/2019	7.38 €	-2.55%	-0.27%	-1.00%	-1.78%	-0.77%	1.57%	-0.49	37.34%
2/15/2019	7.72 €	4.63%	0.86%	1.72%	3.21%	1.43%	1.57%	0.91	63.48%
2/19/2019	7.59 €	-1.67%	0.57%	-1.53%	-1.21%	-0.46%	1.57%	-0.29	22.79%
2/20/2019	7.69 €	1.26%	0.42%	0.41%	0.98%	0.28%	1.57%	0.18	14.36%
2/21/2019	7.66 €	-0.38%	-0.33%	-0.37%	-1.12%	0.74%	1.54%	0.48	36.92%
2/22/2019	7.62 €	-0.50%	0.55%	-0.52%	0.00%	-0.49%	1.54%	-0.32	25.07%
2/25/2019	7.75 €	1.63%	0.47%	0.82%	1.58%	0.05%	1.55%	0.03	2.43%
2/26/2019	7.83 €	1.06%	-0.15%	-0.10%	-0.51%	1.57%	1.54%	1.02	68.97%
2/27/2019	7.98 €	1.99%	-0.33%	0.66%	0.18%	1.81%	1.54%	1.17	75.76%
2/28/2019	8.16 €	2.22%	0.05%	-0.27%	-0.40%	2.61%	1.55%	1.69	90.73%
3/1/2019	8.17 €	0.15%	0.11%	0.06%	0.11%	0.04%	1.56%	0.03	2.04%
3/4/2019	8.13 €	-0.50%	-0.07%	-0.26%	-0.57%	0.07%	1.56%	0.04	3.33%
3/5/2019	8.06 €	-0.85%	0.02%	-0.59%	-0.84%	-0.01%	1.56%	0.00	0.37%
3/6/2019	8.17 €	1.35%	-0.40%	0.73%	0.20%	1.15%	1.56%	0.74	53.86%
3/7/2019	7.75 €	-5.13%	-0.85%	-0.65%	-2.20%	-2.93%	1.56%	-1.88	93.82%
3/8/2019	7.68 €	-0.95%	-0.85%	0.55%	-0.71%	-0.25%	1.56%	-0.16	12.49%
3/11/2019	8.06 €	4.96%	1.19%	0.17%	1.87%	3.09%	1.55%	1.99	95.23%
3/12/2019	7.86 €	-2.51%	0.70%	-0.88%	-0.20%	-2.31%	1.56%	-1.48	85.91%
3/13/2019	7.96 €	1.29%	0.54%	0.43%	1.25%	0.04%	1.57%	0.02	1.92%
3/14/2019	7.89 €	-0.88%	0.05%	0.77%	0.97%	-1.85%	1.57%	-1.18	76.00%
3/15/2019	7.82 €	-0.93%	0.67%	-0.42%	0.33%	-1.25%	1.57%	-0.80	57.40%
3/18/2019	8.14 €	4.15%	0.12%	1.22%	1.64%	2.51%	1.58%	1.59	88.71%
3/19/2019	8.02 €	-1.45%	0.71%	-0.40%	0.41%	-1.86%	1.58%	-1.18	75.90%
3/20/2019	7.75 €	-3.34%	-0.98%	-0.60%	-2.42%	-0.93%	1.58%	-0.58	44.03%
3/21/2019	7.44 €	-4.10%	0.62%	-3.37%	-3.75%	-0.35%	1.59%	-0.22	17.42%
3/22/2019	7.28 €	-2.14%	-1.10%	-2.07%	-4.58%	2.44%	1.55%	1.57	88.31%
3/25/2019	7.23 €	-0.71%	-0.61%	0.35%	-0.59%	-0.13%	1.56%	-0.08	6.46%
3/26/2019	7.31 €	1.11%	0.75%	-0.57%	0.24%	0.87%	1.56%	0.56	42.33%
3/27/2019	7.51 €	2.86%	-0.45%	1.33%	0.96%	1.90%	1.56%	1.22	77.71%
3/28/2019	7.26 €	-3.42%	-0.09%	-0.02%	-0.27%	-3.15%	1.56%	-2.02	95.50%
3/29/2019	7.26 €	0.04%	0.73%	0.50%	1.63%	-1.59%	1.57%	-1.01	68.77%
4/1/2019	7.53 €	3.66%	1.04%	1.63%	3.59%	0.07%	1.57%	0.05	3.65%
4/2/2019	7.58 €	0.69%	0.12%	0.95%	1.32%	-0.63%	1.57%	-0.40	30.95%
4/3/2019	7.65 €	0.88%	0.87%	-0.25%	0.87%	0.02%	1.57%	0.01	0.91%
4/4/2019	7.58 €	-0.82%	-0.30%	1.06%	0.83%	-1.65%	1.57%	-1.06	70.78%
4/5/2019	7.49 €	-1.19%	0.33%	-0.83%	-0.73%	-0.46%	1.57%	-0.29	22.93%
4/8/2019	7.35 €	-1.91%	0.03%	0.13%	0.07%	-1.98%	1.57%	-1.26	79.04%
4/9/2019	7.30 €	-0.73%	-0.18%	-0.07%	-0.51%	-0.23%	1.57%	-0.14	11.36%
4/10/2019	7.24 €	-0.73%	0.08%	-0.27%	-0.39%	-0.33%	1.57%	-0.21	16.79%
4/11/2019	7.45 €	2.90%	0.01%	0.84%	0.97%	1.93%	1.57%	1.23	77.98%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
4/12/2019	7.62 €	2.19%	0.39%	2.50%	3.80%	-1.61%	1.57%	-1.03	69.41%
4/15/2019	7.65 €	0.43%	0.13%	-0.30%	-0.35%	0.78%	1.57%	0.50	38.12%
4/16/2019	7.78 €	1.66%	0.26%	0.22%	0.55%	1.12%	1.57%	0.71	52.19%
4/17/2019	7.83 €	0.64%	-0.13%	1.84%	2.13%	-1.49%	1.57%	-0.95	65.62%
4/18/2019	7.78 €	-0.54%	-0.17%	0.90%	0.81%	-1.34%	1.57%	-0.85	60.53%
4/23/2019	7.66 €	-1.61%	0.69%	-1.40%	-0.96%	-0.65%	1.57%	-0.41	31.95%
4/24/2019	7.59 €	-0.86%	0.01%	-0.39%	-0.66%	-0.20%	1.57%	-0.13	10.34%
4/25/2019	7.48 €	-1.49%	-0.26%	0.46%	0.05%	-1.54%	1.56%	-0.99	67.78%
4/26/2019	7.34 €	-1.85%	0.11%	0.09%	0.12%	-1.96%	1.56%	-1.26	79.07%
4/29/2019	7.40 €	0.74%	0.31%	1.76%	2.64%	-1.91%	1.55%	-1.23	78.11%
4/30/2019	7.37 €	-0.35%	-0.12%	-0.67%	-1.20%	0.85%	1.55%	0.55	41.68%
5/2/2019	7.39 €	0.27%	-0.70%	0.54%	-0.51%	0.78%	1.55%	0.50	38.47%
5/3/2019	7.35 €	-0.58%	0.75%	0.46%	1.59%	-2.17%	1.55%	-1.40	83.84%
5/6/2019	7.20 €	-1.99%	-0.59%	-0.66%	-1.92%	-0.07%	1.54%	-0.04	3.49%
5/7/2019	7.02 €	-2.54%	-1.09%	-0.46%	-2.43%	-0.11%	1.54%	-0.07	5.74%
5/8/2019	7.04 €	0.33%	-0.15%	-0.06%	-0.47%	0.80%	1.54%	0.52	39.53%
5/9/2019	6.86 €	-2.56%	-1.34%	-0.02%	-2.24%	-0.31%	1.54%	-0.20	16.07%
5/10/2019	6.94 €	1.20%	-0.06%	0.16%	-0.04%	1.23%	1.54%	0.80	57.69%
5/13/2019	6.80 €	-1.99%	-0.87%	-1.05%	-2.91%	0.92%	1.54%	0.60	44.85%
5/14/2019	6.89 €	1.23%	0.83%	0.32%	1.54%	-0.31%	1.54%	-0.20	15.97%
5/15/2019	6.84 €	-0.64%	0.28%	-1.16%	-1.27%	0.63%	1.53%	0.41	31.67%
5/16/2019	6.91 €	0.99%	1.05%	-0.05%	1.40%	-0.41%	1.53%	-0.27	20.99%
5/17/2019	6.84 €	-1.00%	-0.31%	-0.45%	-1.23%	0.23%	1.53%	0.15	12.00%
5/20/2019	6.65 €	-2.89%	-0.88%	0.45%	-0.88%	-2.01%	1.53%	-1.31	80.95%
5/21/2019	6.71 €	0.98%	0.48%	0.16%	0.81%	0.16%	1.53%	0.11	8.50%
5/22/2019	6.62 €	-1.42%	-0.15%	-0.33%	-0.81%	-0.61%	1.53%	-0.40	30.82%
5/23/2019	6.46 €	-2.39%	-1.20%	-0.37%	-2.49%	0.10%	1.53%	0.07	5.43%
5/24/2019	6.37 €	-1.39%	0.36%	0.20%	0.67%	-2.07%	1.52%	-1.36	82.40%
5/28/2019	6.31 €	-0.97%	0.06%	-0.19%	-0.30%	-0.67%	1.51%	-0.44	34.21%
5/29/2019	6.15 €	-2.43%	-1.76%	0.20%	-2.60%	0.17%	1.51%	0.12	9.16%
5/30/2019	6.19 €	0.67%	0.33%	-0.06%	0.30%	0.37%	1.51%	0.25	19.37%
5/31/2019	6.09 €	-1.71%	-0.67%	-0.72%	-2.10%	0.39%	1.51%	0.26	20.35%
6/3/2019	5.98 €	-1.84%	-0.08%	0.11%	-0.09%	-1.75%	1.46%	-1.20	76.72%
6/4/2019	6.24 €	4.45%	0.93%	1.84%	3.65%	0.80%	1.46%	0.55	41.59%
6/5/2019	6.14 €	-1.65%	0.91%	-1.06%	-0.08%	-1.57%	1.46%	-1.07	71.61%
6/6/2019	5.96 €	-2.93%	0.54%	-0.72%	-0.24%	-2.69%	1.47%	-1.84	93.26%
6/7/2019	5.97 €	0.13%	1.27%	-1.60%	-0.34%	0.47%	1.48%	0.32	25.03%
6/11/2019	6.19 €	3.75%	0.66%	0.95%	2.09%	1.66%	1.48%	1.12	73.80%
6/12/2019	6.13 €	-0.94%	-0.37%	-0.80%	-1.75%	0.81%	1.48%	0.55	41.61%
6/13/2019	6.10 €	-0.47%	0.11%	-0.05%	-0.03%	-0.44%	1.48%	-0.30	23.26%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
6/14/2019	6.03 €	-1.25%	-0.22%	-0.15%	-0.67%	-0.58%	1.48%	-0.39	30.21%
6/17/2019	6.11 €	1.36%	0.12%	0.47%	0.67%	0.69%	1.48%	0.46	35.66%
6/18/2019	6.33 €	3.62%	0.99%	-0.16%	1.14%	2.48%	1.48%	1.67	90.41%
6/19/2019	6.49 €	2.45%	0.16%	0.52%	0.83%	1.62%	1.49%	1.09	72.30%
6/20/2019	6.32 €	-2.59%	0.93%	-2.69%	-2.30%	-0.29%	1.49%	-0.19	15.34%
6/21/2019	6.36 €	0.68%	0.16%	0.98%	1.42%	-0.74%	1.49%	-0.50	37.95%
6/24/2019	6.27 €	-1.40%	0.06%	-1.13%	-1.56%	0.16%	1.49%	0.11	8.38%
6/25/2019	6.26 €	-0.18%	-0.49%	-0.22%	-1.17%	0.99%	1.49%	0.67	49.52%
6/26/2019	6.50 €	3.80%	-0.43%	1.36%	1.05%	2.75%	1.49%	1.85	93.46%
6/27/2019	6.56 €	0.98%	0.08%	0.32%	0.45%	0.53%	1.50%	0.36	27.72%
6/28/2019	6.78 €	3.32%	0.42%	1.59%	2.70%	0.62%	1.49%	0.42	32.43%
7/1/2019	6.76 €	-0.37%	0.87%	0.23%	1.52%	-1.89%	1.49%	-1.26	79.23%
7/2/2019	6.75 €	-0.04%	0.04%	-0.45%	-0.65%	0.61%	1.50%	0.41	31.64%
7/3/2019	6.93 €	2.67%	0.77%	-0.69%	0.09%	2.57%	1.49%	1.73	91.47%
7/5/2019	7.18 €	3.51%	-0.50%	1.26%	0.88%	2.63%	1.50%	1.75	91.93%
7/8/2019	6.79 €	-5.39%	-0.24%	0.00%	-0.45%	-4.94%	1.49%	-3.32	99.90%
7/9/2019	6.51 €	-4.17%	-0.16%	0.02%	-0.32%	-3.84%	1.52%	-2.53	98.79%
7/10/2019	6.53 €	0.38%	0.45%	-0.76%	-0.53%	0.91%	1.54%	0.59	44.68%
7/11/2019	6.59 €	0.93%	0.27%	0.20%	0.56%	0.37%	1.54%	0.24	19.10%
7/12/2019	6.76 €	2.50%	0.13%	0.28%	0.47%	2.03%	1.54%	1.32	81.33%
7/15/2019	6.89 €	1.91%	0.18%	-0.24%	-0.17%	2.08%	1.54%	1.35	82.15%
7/16/2019	7.18 €	4.33%	-0.11%	0.27%	0.11%	4.22%	1.55%	2.73	99.31%
7/17/2019	7.01 €	-2.38%	-0.34%	0.16%	-0.41%	-1.97%	1.54%	-1.28	79.83%
7/18/2019	6.98 €	-0.50%	-0.61%	0.56%	-0.28%	-0.22%	1.53%	-0.14	11.37%
7/19/2019	6.89 €	-1.20%	0.60%	-0.57%	0.01%	-1.21%	1.53%	-0.79	57.04%
7/22/2019	6.93 €	0.46%	-0.33%	0.27%	-0.24%	0.71%	1.53%	0.46	35.54%
7/23/2019	7.13 €	3.02%	0.34%	1.56%	2.55%	0.47%	1.53%	0.31	24.17%
7/24/2019	7.00 €	-1.85%	0.37%	-0.42%	-0.14%	-1.71%	1.53%	-1.12	73.52%
7/25/2019	7.11 €	1.51%	-0.08%	-0.26%	-0.60%	2.11%	1.53%	1.38	83.03%
7/26/2019	7.12 €	0.17%	0.20%	-0.01%	0.17%	0.00%	1.54%	0.00	0.09%
7/29/2019	7.08 €	-0.63%	-0.04%	0.14%	0.01%	-0.64%	1.54%	-0.42	32.23%
7/30/2019	6.90 €	-2.52%	-0.43%	-0.73%	-1.80%	-0.72%	1.53%	-0.47	35.97%
7/31/2019	7.04 €	2.07%	-0.01%	0.31%	0.27%	1.80%	1.53%	1.18	76.01%
8/1/2019	7.10 €	0.78%	-0.11%	0.47%	0.34%	0.45%	1.52%	0.29	22.98%
8/2/2019	7.00 €	-1.34%	-2.54%	-1.14%	-5.61%	4.27%	1.52%	2.80	99.45%
8/5/2019	6.89 €	-1.64%	-1.70%	-0.34%	-3.09%	1.45%	1.55%	0.94	65.16%
8/6/2019	6.72 €	-2.35%	-0.65%	0.10%	-0.92%	-1.43%	1.54%	-0.92	64.37%
8/7/2019	6.59 €	-2.04%	0.32%	-1.58%	-1.80%	-0.24%	1.55%	-0.16	12.42%
8/8/2019	6.88 €	4.46%	1.81%	0.55%	3.26%	1.20%	1.55%	0.78	56.28%
8/9/2019	6.66 €	-3.18%	-0.50%	-0.86%	-2.04%	-1.14%	1.55%	-0.74	53.87%

Exhibit 11E**Deutsche Bank AG (GY)**

Actual vs. Predicted Returns

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
8/12/2019	6.30 €	-5.49%	-0.32%	-0.78%	-1.65%	-3.84%	1.54%	-2.49	98.64%
8/13/2019	6.38 €	1.30%	0.56%	0.84%	1.86%	-0.56%	1.56%	-0.36	27.77%
8/14/2019	6.05 €	-5.21%	-1.75%	-2.06%	-5.59%	0.38%	1.56%	0.24	19.28%
8/15/2019	5.88 €	-2.68%	-0.67%	0.52%	-0.43%	-2.25%	1.56%	-1.44	85.00%
8/16/2019	6.16 €	4.71%	1.16%	0.74%	2.64%	2.07%	1.57%	1.32	81.29%
8/19/2019	6.33 €	2.69%	1.28%	-0.31%	1.41%	1.29%	1.57%	0.82	58.60%
8/20/2019	6.30 €	-0.46%	-0.29%	-0.61%	-1.41%	0.95%	1.57%	0.60	45.29%
8/21/2019	6.35 €	0.81%	0.45%	-0.39%	0.04%	0.77%	1.57%	0.49	37.43%
8/22/2019	6.47 €	1.94%	-0.37%	1.14%	0.88%	1.05%	1.57%	0.67	49.57%
8/23/2019	6.36 €	-1.73%	-0.86%	-0.33%	-1.89%	0.16%	1.57%	0.10	8.11%
8/26/2019	6.33 €	-0.41%	-0.42%	0.15%	-0.54%	0.13%	1.58%	0.08	6.46%
8/27/2019	6.43 €	1.45%	0.34%	-0.96%	-0.90%	2.35%	1.57%	1.49	86.35%
8/28/2019	6.46 €	0.58%	0.09%	0.74%	1.06%	-0.48%	1.58%	-0.30	23.86%
8/29/2019	6.55 €	1.39%	1.02%	0.71%	2.45%	-1.06%	1.58%	-0.67	49.63%
8/30/2019	6.57 €	0.31%	0.06%	0.37%	0.50%	-0.20%	1.58%	-0.12	9.87%
9/3/2019	6.62 €	0.79%	-0.36%	-1.01%	-2.01%	2.80%	1.58%	1.77	92.23%
9/4/2019	6.74 €	1.78%	1.00%	0.55%	2.19%	-0.41%	1.59%	-0.26	20.43%
9/5/2019	7.09 €	5.13%	1.32%	1.21%	3.57%	1.56%	1.59%	0.98	67.22%
9/6/2019	7.11 €	0.37%	0.19%	-0.68%	-0.70%	1.07%	1.59%	0.67	49.58%
9/9/2019	7.33 €	3.01%	0.05%	2.42%	3.27%	-0.27%	1.60%	-0.17	13.18%
9/10/2019	7.45 €	1.66%	-0.50%	2.11%	2.00%	-0.34%	1.59%	-0.21	16.68%
9/11/2019	7.49 €	0.52%	0.87%	-0.59%	0.51%	0.01%	1.59%	0.01	0.63%
9/12/2019	7.42 €	-0.95%	0.64%	-0.46%	0.33%	-1.28%	1.59%	-0.80	57.65%
9/13/2019	7.66 €	3.19%	0.23%	2.15%	3.19%	0.00%	1.59%	0.00	0.15%
9/16/2019	7.50 €	-2.08%	-0.53%	-0.37%	-1.39%	-0.69%	1.59%	-0.43	33.44%
9/17/2019	7.31 €	-2.47%	0.15%	-1.04%	-1.23%	-1.24%	1.59%	-0.78	56.44%
9/18/2019	7.22 €	-1.31%	-0.11%	-0.09%	-0.38%	-0.94%	1.59%	-0.59	44.51%
9/19/2019	7.36 €	2.05%	0.66%	0.81%	2.06%	-0.01%	1.59%	0.00	0.28%
9/20/2019	7.31 €	-0.76%	-0.31%	0.33%	-0.12%	-0.64%	1.59%	-0.40	31.34%
9/23/2019	7.05 €	-3.50%	-0.44%	-1.03%	-2.17%	-1.33%	1.59%	-0.84	59.65%
9/24/2019	6.91 €	-2.00%	-0.15%	-0.45%	-0.94%	-1.06%	1.59%	-0.67	49.40%
9/25/2019	6.94 €	0.48%	-0.61%	1.06%	0.40%	0.08%	1.59%	0.05	3.79%
9/26/2019	6.80 €	-2.05%	0.08%	-0.34%	-0.44%	-1.61%	1.59%	-1.01	68.84%
9/27/2019	6.93 €	1.88%	-0.05%	0.47%	0.47%	1.41%	1.59%	0.89	62.49%
9/30/2019	6.87 €	-0.84%	0.05%	-0.02%	-0.02%	-0.81%	1.59%	-0.51	39.06%
10/1/2019	6.68 €	-2.82%	-0.45%	-0.44%	-1.39%	-1.43%	1.59%	-0.90	63.10%
10/2/2019	6.57 €	-1.66%	-2.19%	-0.39%	-4.04%	2.38%	1.59%	1.49	86.30%
10/4/2019	6.48 €	-1.31%	1.13%	-1.16%	0.07%	-1.38%	1.60%	-0.86	61.19%
10/7/2019	6.48 €	0.02%	0.54%	0.36%	1.22%	-1.21%	1.60%	-0.75	54.75%
10/8/2019	6.30 €	-2.73%	-1.41%	-0.61%	-3.11%	0.38%	1.60%	0.24	18.77%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
10/9/2019	6.29 €	-0.16%	0.35%	0.44%	1.04%	-1.20%	1.60%	-0.75	54.39%
10/10/2019	6.46 €	2.70%	0.92%	1.02%	2.71%	0.00%	1.60%	0.00	0.22%
10/11/2019	6.80 €	5.15%	1.60%	1.11%	3.91%	1.24%	1.60%	0.77	56.08%
10/14/2019	6.85 €	0.81%	-0.52%	0.01%	-0.96%	1.77%	1.59%	1.11	73.15%
10/15/2019	7.05 €	2.88%	0.89%	1.59%	3.55%	-0.68%	1.60%	-0.43	32.95%
10/16/2019	7.12 €	0.99%	0.05%	0.09%	0.10%	0.89%	1.59%	0.56	42.38%
10/17/2019	7.14 €	0.25%	0.23%	-0.49%	-0.40%	0.66%	1.59%	0.41	31.97%
10/18/2019	7.09 €	-0.63%	-0.15%	0.36%	0.15%	-0.78%	1.59%	-0.49	37.49%
10/21/2019	7.30 €	2.95%	0.35%	1.63%	2.75%	0.20%	1.60%	0.13	10.05%
10/22/2019	7.19 €	-1.53%	0.24%	0.19%	0.57%	-2.10%	1.59%	-1.32	81.25%
10/23/2019	7.19 €	-0.03%	-0.24%	0.53%	0.25%	-0.28%	1.60%	-0.17	13.79%
10/24/2019	7.06 €	-1.75%	0.34%	-0.42%	-0.12%	-1.63%	1.59%	-1.03	69.48%
10/25/2019	7.18 €	1.66%	0.39%	0.50%	1.23%	0.43%	1.59%	0.27	21.24%
10/28/2019	7.23 €	0.72%	0.40%	-0.34%	0.07%	0.66%	1.58%	0.42	32.22%
10/29/2019	7.22 €	-0.21%	0.15%	-0.30%	-0.29%	0.08%	1.58%	0.05	4.16%
10/30/2019	6.64 €	-7.93%	-0.15%	-0.93%	-1.69%	-6.23%	1.57%	-3.97	99.99%
10/31/2019	6.49 €	-2.24%	-0.14%	-0.74%	-1.42%	-0.82%	1.57%	-0.52	39.98%
11/1/2019	6.60 €	1.56%	0.85%	0.79%	2.47%	-0.91%	1.56%	-0.58	43.94%
11/4/2019	6.84 €	3.71%	0.58%	1.00%	2.30%	1.41%	1.55%	0.91	63.79%
11/5/2019	6.94 €	1.39%	-0.09%	0.82%	0.94%	0.45%	1.54%	0.29	22.99%
11/6/2019	6.93 €	-0.06%	0.05%	0.15%	0.20%	-0.26%	1.54%	-0.17	13.17%
11/7/2019	7.06 €	1.82%	0.44%	0.75%	1.74%	0.08%	1.54%	0.05	4.14%
11/8/2019	6.90 €	-2.21%	-0.26%	-0.53%	-1.32%	-0.89%	1.54%	-0.58	43.48%
11/11/2019	6.87 €	-0.49%	0.00%	-0.16%	-0.33%	-0.16%	1.53%	-0.11	8.38%
11/12/2019	6.96 €	1.34%	0.42%	-0.24%	0.26%	1.08%	1.53%	0.70	51.84%
11/13/2019	6.65 €	-4.44%	-0.29%	-1.21%	-2.40%	-2.04%	1.53%	-1.33	81.61%
11/14/2019	6.55 €	-1.46%	-0.17%	-0.16%	-0.64%	-0.82%	1.54%	-0.54	40.72%
11/15/2019	6.58 €	0.34%	0.70%	-0.02%	1.06%	-0.72%	1.54%	-0.47	36.03%
11/18/2019	6.62 €	0.65%	0.24%	-0.14%	0.09%	0.57%	1.54%	0.37	28.77%
11/19/2019	6.59 €	-0.45%	0.05%	0.45%	0.65%	-1.10%	1.54%	-0.72	52.55%
11/20/2019	6.60 €	0.17%	-0.32%	0.01%	-0.65%	0.82%	1.54%	0.53	40.42%
11/21/2019	6.64 €	0.55%	-0.50%	0.38%	-0.38%	0.92%	1.53%	0.60	45.31%
11/22/2019	6.68 €	0.72%	0.15%	0.64%	1.11%	-0.39%	1.53%	-0.25	19.97%
11/25/2019	6.67 €	-0.15%	0.78%	-0.34%	0.70%	-0.85%	1.53%	-0.56	42.09%
11/26/2019	6.60 €	-1.12%	0.24%	-0.82%	-0.94%	-0.19%	1.53%	-0.12	9.62%
11/27/2019	6.67 €	1.14%	0.24%	0.57%	1.12%	0.01%	1.53%	0.01	0.76%
11/29/2019	6.54 €	-1.93%	-0.16%	-0.05%	-0.46%	-1.47%	1.52%	-0.97	66.53%
12/2/2019	6.47 €	-1.19%	-0.81%	0.57%	-0.64%	-0.55%	1.50%	-0.37	28.57%
12/3/2019	6.33 €	-2.09%	-0.86%	-1.07%	-3.13%	1.04%	1.50%	0.69	51.15%
12/4/2019	6.47 €	2.21%	0.86%	0.68%	2.36%	-0.15%	1.50%	-0.10	8.04%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
12/5/2019	6.45 €	-0.37%	-0.05%	0.20%	0.12%	-0.50%	1.50%	-0.33	25.88%
12/6/2019	6.53 €	1.21%	0.98%	0.58%	2.44%	-1.23%	1.50%	-0.82	58.84%
12/9/2019	6.54 €	0.23%	-0.10%	-0.18%	-0.54%	0.77%	1.48%	0.52	39.50%
12/10/2019	6.49 €	-0.84%	-0.19%	-0.18%	-0.71%	-0.13%	1.48%	-0.09	7.16%
12/11/2019	6.56 €	1.16%	0.07%	0.14%	0.23%	0.92%	1.48%	0.62	46.73%
12/12/2019	6.78 €	3.38%	0.60%	1.52%	3.21%	0.17%	1.48%	0.12	9.31%
12/13/2019	6.72 €	-0.90%	0.40%	-0.55%	-0.22%	-0.68%	1.44%	-0.47	36.20%
12/16/2019	6.96 €	3.56%	1.01%	0.36%	2.23%	1.33%	1.44%	0.92	64.19%
12/17/2019	6.99 €	0.42%	-0.12%	0.01%	-0.30%	0.72%	1.44%	0.50	38.09%
12/18/2019	7.02 €	0.43%	-0.05%	0.48%	0.53%	-0.11%	1.44%	-0.07	5.83%
12/19/2019	7.12 €	1.44%	0.13%	-0.41%	-0.48%	1.92%	1.44%	1.34	81.70%
12/20/2019	7.07 €	-0.76%	0.50%	-0.59%	-0.07%	-0.69%	1.44%	-0.48	36.77%
12/23/2019	6.91 €	-2.25%	0.08%	-0.60%	-0.86%	-1.39%	1.42%	-0.98	67.01%
12/27/2019	6.91 €	-0.01%	0.64%	0.14%	1.24%	-1.26%	1.42%	-0.88	62.13%
1/2/2020	7.35 €	6.39%	-0.09%	0.96%	1.20%	5.18%	1.42%	3.64	99.97%
1/3/2020	7.25 €	-1.32%	0.00%	-1.01%	-1.64%	0.32%	1.46%	0.22	17.49%
1/6/2020	7.19 €	-0.90%	-0.32%	-0.29%	-1.05%	0.15%	1.46%	0.11	8.45%
1/7/2020	7.43 €	3.47%	0.28%	-0.64%	-0.61%	4.07%	1.45%	2.80	99.45%
1/8/2020	7.69 €	3.38%	0.07%	0.28%	0.47%	2.91%	1.48%	1.97	95.01%
1/9/2020	7.72 €	0.40%	0.56%	-0.42%	0.23%	0.17%	1.48%	0.12	9.39%
1/10/2020	7.70 €	-0.27%	0.15%	-0.88%	-1.12%	0.85%	1.46%	0.58	43.91%
1/13/2020	7.58 €	-1.49%	0.02%	-0.07%	-0.12%	-1.38%	1.47%	-0.94	65.19%
1/14/2020	7.75 €	2.28%	0.28%	1.82%	3.19%	-0.91%	1.47%	-0.62	46.38%
1/15/2020	7.57 €	-2.36%	0.27%	-2.15%	-2.87%	0.51%	1.46%	0.35	27.17%
1/16/2020	7.63 €	0.78%	0.16%	-0.12%	0.03%	0.75%	1.46%	0.51	39.23%
1/17/2020	7.59 €	-0.54%	0.50%	-0.58%	-0.11%	-0.43%	1.45%	-0.29	23.16%
1/21/2020	7.50 €	-1.16%	-0.03%	-0.73%	-1.18%	0.02%	1.44%	0.01	1.16%
1/22/2020	7.57 €	0.96%	0.11%	-0.58%	-0.73%	1.69%	1.44%	1.18	75.89%
1/23/2020	7.68 €	1.48%	-0.67%	-0.20%	-1.47%	2.95%	1.44%	2.04	95.79%
1/24/2020	7.83 €	1.89%	0.24%	-0.59%	-0.54%	2.43%	1.45%	1.67	90.44%
1/27/2020	7.75 €	-1.05%	-1.88%	0.32%	-2.69%	1.64%	1.45%	1.13	74.12%
1/28/2020	7.87 €	1.59%	0.64%	0.64%	1.90%	-0.31%	1.45%	-0.21	16.84%
1/29/2020	7.97 €	1.32%	0.23%	-0.22%	0.01%	1.31%	1.45%	0.91	63.43%
1/30/2020	8.31 €	4.23%	-0.83%	0.05%	-1.32%	5.54%	1.45%	3.82	99.98%
1/31/2020	8.28 €	-0.32%	-0.52%	0.03%	-0.85%	0.52%	1.45%	0.36	28.08%
2/3/2020	8.13 €	-1.85%	0.21%	-0.03%	0.30%	-2.15%	1.45%	-1.48	85.89%
2/4/2020	8.17 €	0.42%	1.43%	-0.10%	2.25%	-1.83%	1.46%	-1.26	78.98%
2/5/2020	8.26 €	1.21%	0.59%	0.38%	1.47%	-0.26%	1.46%	-0.18	14.21%
2/6/2020	9.33 €	12.90%	0.70%	-0.20%	0.84%	12.06%	1.46%	8.27	100.00%
2/7/2020	9.53 €	2.14%	-0.31%	0.55%	0.24%	1.90%	1.65%	1.15	74.94%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
2/10/2020	9.40 €	-1.32%	-0.11%	-0.10%	-0.28%	-1.05%	1.64%	-0.64	47.59%
2/11/2020	9.67 €	2.83%	0.72%	0.07%	1.33%	1.50%	1.64%	0.91	63.81%
2/12/2020	9.99 €	3.29%	0.39%	0.21%	0.98%	2.31%	1.64%	1.41	83.98%
2/13/2020	10.19 €	2.00%	-0.08%	-0.24%	-0.43%	2.43%	1.64%	1.48	85.94%
2/14/2020	10.19 €	-0.02%	-0.03%	-0.05%	-0.06%	0.04%	1.65%	0.02	1.93%
2/18/2020	9.98 €	-2.02%	-0.65%	-1.21%	-2.69%	0.67%	1.65%	0.40	31.33%
2/19/2020	9.91 €	-0.69%	0.73%	0.30%	1.66%	-2.36%	1.65%	-1.43	84.51%
2/20/2020	9.87 €	-0.45%	-0.91%	0.87%	-0.23%	-0.22%	1.66%	-0.14	10.74%
2/21/2020	9.52 €	-3.47%	-0.14%	-0.41%	-0.73%	-2.73%	1.66%	-1.65	89.98%
2/24/2020	8.94 €	-6.13%	-2.83%	0.54%	-3.84%	-2.29%	1.67%	-1.37	82.90%
2/25/2020	8.77 €	-1.89%	-1.66%	-0.06%	-2.83%	0.94%	1.67%	0.56	42.60%
2/26/2020	8.86 €	1.01%	-0.52%	-0.38%	-1.35%	2.37%	1.67%	1.42	84.19%
2/27/2020	8.29 €	-6.39%	-3.53%	-0.52%	-6.52%	0.13%	1.68%	0.08	6.33%
2/28/2020	7.88 €	-5.00%	-3.48%	1.43%	-3.86%	-1.15%	1.67%	-0.69	50.60%
3/2/2020	7.57 €	-3.96%	2.46%	-3.26%	-0.37%	-3.59%	1.67%	-2.15	96.72%
3/3/2020	7.34 €	-2.99%	1.02%	-1.51%	-0.63%	-2.35%	1.68%	-1.40	83.66%
3/4/2020	7.27 €	-1.02%	0.00%	-1.11%	-1.63%	0.61%	1.69%	0.36	28.07%
3/5/2020	7.04 €	-3.07%	0.30%	-1.96%	-2.42%	-0.65%	1.69%	-0.39	29.98%
3/6/2020	6.78 €	-3.79%	-3.11%	-0.88%	-5.93%	2.14%	1.69%	1.27	79.43%
3/9/2020	5.85 €	-13.61%	-5.41%	-3.92%	-13.50%	-0.11%	1.69%	-0.07	5.27%
3/10/2020	5.88 €	0.48%	-1.45%	2.16%	0.72%	-0.24%	1.68%	-0.14	11.35%
3/11/2020	5.97 €	1.53%	-0.68%	3.40%	3.77%	-2.24%	1.68%	-1.33	81.65%
3/12/2020	4.87 €	-18.44%	-9.41%	1.13%	-13.22%	-5.21%	1.67%	-3.12	99.80%
3/13/2020	5.11 €	4.80%	0.04%	5.55%	7.66%	-2.86%	1.69%	-1.69	90.80%
3/16/2020	4.91 €	-3.90%	-2.02%	-2.87%	-7.22%	3.32%	1.70%	1.96	94.87%
3/17/2020	5.15 €	4.91%	-0.34%	2.55%	2.64%	2.27%	1.71%	1.33	81.54%
3/18/2020	5.14 €	-0.06%	-4.77%	-0.69%	-9.03%	8.97%	1.71%	5.25	100.00%
3/19/2020	5.47 €	6.36%	0.83%	0.28%	1.70%	4.66%	1.79%	2.60	99.01%
3/20/2020	5.53 €	0.99%	-0.20%	2.07%	2.35%	-1.36%	1.81%	-0.75	54.68%
3/23/2020	5.51 €	-0.25%	-4.81%	-0.88%	-8.73%	8.48%	1.81%	4.67	100.00%
3/24/2020	6.19 €	12.34%	8.20%	-0.05%	12.31%	0.03%	1.89%	0.01	1.11%
3/25/2020	6.43 €	3.91%	4.21%	-2.91%	2.84%	1.07%	1.88%	0.57	42.91%
3/26/2020	6.34 €	-1.48%	2.84%	1.14%	5.64%	-7.12%	1.88%	-3.78	99.98%
3/27/2020	5.90 €	-6.96%	-1.28%	-2.44%	-4.64%	-2.32%	1.94%	-1.20	76.81%
3/30/2020	5.82 €	-1.24%	1.16%	-1.99%	-0.64%	-0.59%	1.93%	-0.31	24.08%
3/31/2020	5.97 €	2.49%	1.23%	-1.41%	0.12%	2.37%	1.93%	1.23	77.85%
4/1/2020	5.60 €	-6.22%	-4.36%	-3.14%	-9.97%	3.76%	1.93%	1.94	94.70%
4/2/2020	5.50 €	-1.68%	-0.30%	0.46%	0.13%	-1.81%	1.94%	-0.93	64.76%
4/3/2020	5.43 €	-1.42%	-0.61%	-0.36%	-1.25%	-0.17%	1.95%	-0.09	6.77%
4/6/2020	5.89 €	8.50%	4.28%	-1.85%	4.07%	4.42%	1.95%	2.26	97.55%

Exhibit 11E**Deutsche Bank AG (GY)**

Actual vs. Predicted Returns

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
4/7/2020	6.21 €	5.40%	3.90%	0.77%	6.61%	-1.21%	1.97%	-0.62	46.13%
4/8/2020	6.03 €	-2.84%	-0.04%	0.46%	0.50%	-3.34%	1.97%	-1.70	90.95%
4/9/2020	6.12 €	1.49%	2.39%	3.40%	7.29%	-5.80%	1.97%	-2.94	99.64%
4/14/2020	6.21 €	1.47%	1.07%	-5.93%	-4.59%	6.06%	2.01%	3.01	99.71%
4/15/2020	5.63 €	-9.29%	-2.05%	-1.74%	-4.54%	-4.75%	2.04%	-2.33	97.92%
4/16/2020	5.72 €	1.62%	0.42%	-3.62%	-2.82%	4.44%	2.07%	2.15	96.72%
4/17/2020	5.97 €	4.33%	1.95%	2.60%	5.21%	-0.87%	2.08%	-0.42	32.48%
4/20/2020	5.91 €	-1.06%	0.69%	0.32%	1.30%	-2.36%	2.09%	-1.13	74.03%
4/21/2020	5.56 €	-5.94%	-4.15%	0.33%	-5.84%	-0.10%	2.09%	-0.05	3.72%
4/22/2020	5.65 €	1.66%	1.70%	-0.66%	1.90%	-0.25%	2.08%	-0.12	9.38%
4/23/2020	5.85 €	3.49%	1.26%	-0.49%	1.41%	2.08%	2.08%	1.00	68.20%
4/24/2020	5.45 €	-6.76%	-0.95%	-0.71%	-2.03%	-4.73%	2.08%	-2.27	97.60%
4/27/2020	6.14 €	12.68%	2.56%	3.00%	6.52%	6.16%	2.11%	2.92	99.62%
4/28/2020	6.39 €	4.05%	0.61%	1.62%	2.51%	1.54%	2.14%	0.72	52.88%
4/29/2020	7.16 €	11.95%	1.65%	1.22%	3.76%	8.19%	2.13%	3.84	99.98%
4/30/2020	6.78 €	-5.27%	-0.45%	-2.01%	-2.60%	-2.67%	2.14%	-1.25	78.64%
5/4/2020	6.43 €	-5.19%	-3.37%	-1.16%	-6.34%	1.15%	2.15%	0.53	40.60%
5/5/2020	6.55 €	1.88%	2.13%	-0.23%	3.08%	-1.20%	2.15%	-0.56	42.39%
5/6/2020	6.34 €	-3.16%	-0.56%	-2.69%	-3.49%	0.33%	2.14%	0.15	12.15%
5/7/2020	6.56 €	3.39%	0.62%	2.05%	2.99%	0.40%	2.14%	0.19	14.69%
5/8/2020	6.54 €	-0.27%	1.29%	-0.67%	1.36%	-1.63%	2.14%	-0.76	55.31%
5/11/2020	6.37 €	-2.63%	-0.06%	-2.69%	-2.74%	0.11%	2.15%	0.05	3.99%
5/12/2020	6.51 €	2.22%	0.31%	-1.80%	-1.29%	3.51%	2.15%	1.63	89.64%
5/13/2020	6.09 €	-6.35%	-2.65%	-0.85%	-4.90%	-1.45%	2.15%	-0.67	49.76%
5/14/2020	6.05 €	-0.71%	-1.69%	2.33%	-0.33%	-0.38%	2.16%	-0.17	13.79%
5/15/2020	5.94 €	-1.80%	0.95%	-0.33%	1.16%	-2.96%	2.16%	-1.37	82.90%
5/18/2020	6.56 €	10.35%	3.87%	0.23%	6.14%	4.21%	2.18%	1.94	94.60%
5/19/2020	6.59 €	0.44%	0.37%	0.82%	1.41%	-0.97%	2.19%	-0.44	34.17%
5/20/2020	6.85 €	4.09%	0.88%	-0.74%	0.69%	3.40%	2.18%	1.56	87.90%
5/21/2020	6.72 €	-2.03%	-0.94%	0.20%	-1.22%	-0.81%	2.19%	-0.37	28.69%
5/22/2020	6.69 €	-0.36%	-0.51%	-0.82%	-1.54%	1.18%	2.19%	0.54	41.02%
5/26/2020	7.50 €	12.15%	2.70%	2.67%	6.86%	5.29%	2.20%	2.41	98.33%
5/27/2020	7.79 €	3.77%	-0.46%	5.49%	4.87%	-1.10%	2.22%	-0.50	37.99%
5/28/2020	7.83 €	0.55%	2.24%	-3.36%	0.36%	0.19%	2.21%	0.09	6.86%
5/29/2020	7.53 €	-3.82%	-1.09%	-1.03%	-2.64%	-1.18%	2.21%	-0.53	40.53%
6/2/2020	7.95 €	5.51%	1.96%	0.15%	3.37%	2.14%	2.22%	0.96	66.44%
6/3/2020	8.15 €	2.61%	2.07%	2.06%	5.45%	-2.85%	2.22%	-1.28	79.86%
6/4/2020	8.32 €	2.02%	-0.09%	0.84%	0.79%	1.23%	2.23%	0.55	41.93%
6/5/2020	8.71 €	4.70%	2.30%	3.39%	7.07%	-2.37%	2.23%	-1.06	71.10%
6/8/2020	9.04 €	3.80%	0.20%	0.98%	1.41%	2.39%	2.23%	1.07	71.57%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
6/9/2020	8.62 €	-4.60%	0.03%	-2.84%	-2.47%	-2.13%	2.23%	-0.96	65.96%
6/10/2020	8.75 €	1.40%	-0.26%	-1.26%	-1.49%	2.89%	2.23%	1.30	80.41%
6/11/2020	8.13 €	-6.99%	-3.46%	-3.20%	-8.45%	1.46%	2.23%	0.66	48.79%
6/12/2020	8.28 €	1.77%	-1.26%	1.62%	-0.36%	2.13%	2.23%	0.96	66.04%
6/15/2020	8.25 €	-0.34%	-0.75%	0.19%	-0.86%	0.52%	2.24%	0.23	18.33%
6/16/2020	8.48 €	2.79%	3.29%	-0.66%	4.81%	-2.02%	2.24%	-0.90	63.26%
6/17/2020	8.44 €	-0.52%	0.19%	-1.04%	-0.54%	0.02%	2.24%	0.01	0.60%
6/18/2020	8.26 €	-2.05%	-0.43%	-0.33%	-0.85%	-1.20%	2.24%	-0.54	40.80%
6/19/2020	8.34 €	0.96%	0.50%	-1.15%	-0.17%	1.13%	2.23%	0.51	38.62%
6/22/2020	8.31 €	-0.44%	-0.57%	0.04%	-0.73%	0.28%	2.24%	0.13	10.00%
6/23/2020	8.55 €	3.00%	1.49%	-0.45%	2.09%	0.91%	2.23%	0.41	31.66%
6/24/2020	8.12 €	-5.05%	-2.98%	0.29%	-4.32%	-0.73%	2.23%	-0.33	25.56%
6/25/2020	8.39 €	3.28%	-0.18%	1.94%	1.69%	1.59%	2.23%	0.71	52.16%
6/26/2020	8.13 €	-3.04%	-0.16%	-2.15%	-2.13%	-0.91%	2.24%	-0.41	31.65%
6/29/2020	8.43 €	3.65%	0.01%	0.61%	0.71%	2.94%	2.24%	1.31	80.95%
6/30/2020	8.46 €	0.40%	0.98%	-0.97%	0.80%	-0.40%	2.24%	-0.18	14.13%
7/1/2020	8.35 €	-1.38%	0.66%	-1.36%	-0.09%	-1.30%	2.24%	-0.58	43.66%
7/2/2020	8.55 €	2.47%	1.29%	-0.82%	1.42%	1.05%	2.24%	0.47	36.01%
7/6/2020	8.81 €	2.98%	1.35%	-0.61%	1.70%	1.28%	2.24%	0.57	43.33%
7/7/2020	8.81 €	-0.03%	-0.26%	-1.05%	-1.27%	1.23%	2.23%	0.55	41.86%
7/8/2020	8.71 €	-1.08%	-0.75%	0.09%	-1.00%	-0.08%	2.23%	-0.03	2.79%
7/9/2020	8.61 €	-1.10%	-0.60%	-0.52%	-1.29%	0.19%	2.21%	0.09	6.86%
7/10/2020	8.83 €	2.45%	0.85%	1.78%	3.18%	-0.73%	2.19%	-0.33	25.97%
7/13/2020	8.75 €	-0.85%	1.98%	-0.33%	2.99%	-3.84%	2.20%	-1.74	91.73%
7/14/2020	8.73 €	-0.22%	-1.61%	2.36%	-0.22%	0.00%	2.20%	0.00	0.08%
7/15/2020	8.85 €	1.40%	1.69%	-1.09%	1.83%	-0.43%	2.20%	-0.19	15.41%
7/16/2020	8.82 €	-0.38%	-0.40%	1.04%	0.48%	-0.86%	2.20%	-0.39	30.52%
7/17/2020	8.74 €	-0.90%	0.30%	-2.16%	-1.41%	0.51%	2.18%	0.23	18.44%
7/20/2020	8.88 €	1.56%	0.62%	-1.32%	-0.11%	1.66%	2.19%	0.76	55.30%
7/21/2020	8.50 €	-4.27%	1.05%	1.12%	2.83%	-7.10%	2.18%	-3.25	99.87%
7/22/2020	8.50 €	-0.02%	-0.32%	-0.81%	-1.12%	1.10%	2.23%	0.49	37.76%
7/23/2020	8.34 €	-1.81%	0.40%	-0.66%	0.16%	-1.97%	2.23%	-0.88	62.23%
7/24/2020	8.27 €	-0.82%	-1.61%	2.54%	-0.17%	-0.65%	2.23%	-0.29	22.84%
7/27/2020	8.09 €	-2.26%	0.32%	-1.72%	-0.95%	-1.31%	2.23%	-0.59	44.09%
7/28/2020	8.00 €	-1.06%	0.48%	-0.34%	0.52%	-1.58%	2.23%	-0.71	52.19%
7/29/2020	7.80 €	-2.50%	0.09%	0.41%	0.59%	-3.09%	2.23%	-1.38	83.26%
7/30/2020	7.57 €	-2.95%	-0.75%	-0.22%	-1.30%	-1.65%	2.23%	-0.74	53.89%
7/31/2020	7.59 €	0.28%	-0.14%	-0.34%	-0.45%	0.72%	2.23%	0.32	25.36%
8/3/2020	7.83 €	3.19%	1.39%	-0.73%	1.60%	1.58%	2.23%	0.71	52.09%
8/4/2020	7.82 €	-0.18%	0.37%	-0.80%	-0.07%	-0.11%	2.23%	-0.05	4.03%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
8/5/2020	7.86 €	0.54%	0.98%	0.34%	1.91%	-1.37%	2.23%	-0.62	46.11%
8/6/2020	7.75 €	-1.37%	-0.39%	-0.04%	-0.61%	-0.77%	2.23%	-0.34	26.91%
8/7/2020	7.73 €	-0.28%	0.32%	-0.54%	0.07%	-0.35%	2.23%	-0.16	12.47%
8/10/2020	8.01 €	3.61%	0.05%	3.67%	3.40%	0.21%	2.23%	0.09	7.45%
8/11/2020	8.24 €	2.83%	1.01%	2.01%	3.46%	-0.63%	2.22%	-0.28	22.16%
8/12/2020	8.26 €	0.28%	0.43%	-1.26%	-0.36%	0.64%	2.22%	0.29	22.52%
8/13/2020	8.07 €	-2.26%	0.15%	-2.21%	-1.62%	-0.65%	2.20%	-0.29	23.04%
8/14/2020	8.07 €	-0.05%	-0.32%	1.21%	0.66%	-0.71%	2.20%	-0.32	25.36%
8/17/2020	7.96 €	-1.31%	0.33%	-2.40%	-1.49%	0.18%	2.20%	0.08	6.37%
8/18/2020	7.92 €	-0.57%	0.18%	-1.26%	-0.73%	0.17%	2.19%	0.08	6.16%
8/19/2020	8.13 €	2.64%	0.34%	0.17%	0.76%	1.88%	2.19%	0.86	60.90%
8/20/2020	7.88 €	-3.04%	-0.79%	-0.79%	-1.83%	-1.20%	2.19%	-0.55	41.70%
8/21/2020	7.79 €	-1.14%	0.00%	-0.32%	-0.20%	-0.94%	2.19%	-0.43	33.24%
8/24/2020	8.14 €	4.43%	1.03%	0.82%	2.40%	2.03%	2.20%	0.92	64.18%
8/25/2020	8.16 €	0.26%	0.18%	0.39%	0.71%	-0.46%	2.20%	-0.21	16.38%
8/26/2020	8.30 €	1.75%	0.83%	-1.49%	0.06%	1.69%	2.20%	0.77	55.90%
8/27/2020	8.28 €	-0.22%	0.60%	0.40%	1.37%	-1.59%	2.20%	-0.72	53.02%
8/28/2020	8.28 €	-0.01%	0.04%	0.96%	0.98%	-0.99%	2.20%	-0.45	34.86%
8/31/2020	8.03 €	-3.08%	0.10%	-1.70%	-1.27%	-1.81%	2.21%	-0.82	58.57%
9/1/2020	7.96 €	-0.80%	0.19%	-0.78%	-0.33%	-0.47%	2.21%	-0.21	16.86%
9/2/2020	7.90 €	-0.80%	0.51%	0.05%	0.89%	-1.69%	2.20%	-0.77	55.79%
9/3/2020	7.88 €	-0.18%	-1.35%	2.34%	0.01%	-0.19%	2.20%	-0.08	6.70%
9/4/2020	8.14 €	3.21%	-2.49%	3.66%	-0.58%	3.79%	2.20%	1.73	91.42%
9/8/2020	7.87 €	-3.32%	-0.47%	-0.85%	-1.43%	-1.89%	2.21%	-0.85	60.62%
9/9/2020	8.01 €	1.86%	1.21%	-0.73%	1.23%	0.62%	2.21%	0.28	22.14%
9/10/2020	8.00 €	-0.21%	0.24%	-0.41%	0.04%	-0.25%	2.21%	-0.11	8.95%
9/11/2020	7.81 €	-2.29%	-1.12%	1.02%	-0.75%	-1.54%	2.22%	-0.69	51.17%
9/14/2020	7.90 €	1.14%	1.24%	0.35%	2.24%	-1.10%	2.23%	-0.49	37.74%
9/15/2020	7.71 €	-2.39%	0.51%	-3.63%	-2.46%	0.07%	2.22%	0.03	2.54%
9/16/2020	7.87 €	2.00%	0.21%	0.16%	0.47%	1.52%	2.22%	0.69	50.68%
9/17/2020	7.78 €	-1.08%	-1.36%	0.53%	-1.57%	0.49%	2.22%	0.22	17.58%
9/18/2020	7.67 €	-1.40%	-0.51%	0.41%	-0.36%	-1.04%	2.22%	-0.47	35.96%
9/21/2020	7.00 €	-8.76%	-2.92%	-1.10%	-5.39%	-3.37%	2.21%	-1.52	87.01%
9/22/2020	6.93 €	-0.94%	0.94%	-1.55%	0.08%	-1.02%	2.21%	-0.46	35.47%
9/23/2020	6.96 €	0.32%	0.37%	-0.54%	0.13%	0.19%	2.21%	0.09	6.77%
9/24/2020	6.95 €	-0.13%	-1.46%	-0.08%	-2.25%	2.12%	2.21%	0.96	66.11%
9/25/2020	6.77 €	-2.49%	0.33%	-0.71%	-0.10%	-2.39%	2.21%	-1.08	71.91%
9/28/2020	7.27 €	7.35%	2.55%	1.33%	5.13%	2.22%	2.21%	1.00	68.31%
9/29/2020	7.07 €	-2.72%	-0.18%	-1.61%	-1.68%	-1.04%	2.21%	-0.47	36.18%
9/30/2020	7.19 €	1.64%	0.43%	1.03%	1.62%	0.02%	2.21%	0.01	0.65%

Exhibit 11E**Deutsche Bank AG (GY)****Actual vs. Predicted Returns**

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
10/1/2020	7.10 €	-1.25%	0.30%	-0.17%	0.35%	-1.60%	2.21%	-0.72	52.91%
10/2/2020	7.20 €	1.35%	-0.77%	1.52%	0.23%	1.12%	2.21%	0.51	38.67%
10/5/2020	7.36 €	2.28%	1.36%	0.26%	2.35%	-0.07%	2.21%	-0.03	2.50%
10/6/2020	7.78 €	5.71%	0.39%	1.98%	2.43%	3.28%	2.21%	1.48	86.00%
10/7/2020	7.80 €	0.26%	-0.05%	-0.90%	-0.84%	1.09%	2.21%	0.49	37.77%
10/8/2020	7.93 €	1.64%	0.85%	-0.46%	0.93%	0.71%	2.21%	0.32	25.15%
10/9/2020	7.84 €	-1.07%	0.89%	-0.46%	0.99%	-2.06%	2.21%	-0.93	64.69%
10/12/2020	7.86 €	0.22%	1.25%	-1.02%	1.03%	-0.81%	2.21%	-0.37	28.55%
10/13/2020	7.79 €	-0.94%	-0.21%	-1.41%	-1.55%	0.61%	2.21%	0.27	21.52%
10/14/2020	7.74 €	-0.59%	-0.28%	-0.67%	-0.99%	0.40%	2.21%	0.18	14.38%
10/15/2020	7.64 €	-1.25%	-1.46%	1.26%	-1.05%	-0.21%	2.21%	-0.09	7.42%
10/16/2020	7.87 €	2.90%	0.85%	0.54%	1.83%	1.08%	2.21%	0.49	37.22%
10/19/2020	8.00 €	1.72%	-0.28%	0.27%	-0.14%	1.85%	2.21%	0.84	59.66%
10/20/2020	8.15 €	1.88%	-0.72%	1.53%	0.33%	1.55%	2.21%	0.70	51.41%
10/21/2020	7.96 €	-2.39%	-0.02%	0.04%	0.04%	-2.44%	2.21%	-1.10	72.75%
10/22/2020	7.96 €	0.03%	-0.49%	1.96%	1.06%	-1.03%	2.21%	-0.47	35.82%
10/23/2020	8.12 €	2.05%	0.49%	1.55%	2.18%	-0.13%	2.21%	-0.06	4.70%
10/26/2020	8.04 €	-0.99%	-1.68%	0.05%	-2.47%	1.49%	2.21%	0.67	49.72%
10/27/2020	7.91 €	-1.62%	0.12%	-1.00%	-0.66%	-0.95%	2.21%	-0.43	33.32%
10/28/2020	7.76 €	-1.91%	-2.83%	1.31%	-3.10%	1.19%	2.21%	0.54	40.84%
10/29/2020	7.88 €	1.61%	-0.08%	-0.26%	-0.31%	1.93%	2.21%	0.87	61.46%
10/30/2020	7.90 €	0.22%	-1.12%	1.95%	0.09%	0.13%	2.21%	0.06	4.58%
11/2/2020	8.30 €	5.00%	1.33%	1.33%	3.27%	1.73%	2.21%	0.78	56.40%
11/3/2020	8.49 €	2.34%	2.47%	0.87%	4.59%	-2.26%	2.21%	-1.02	69.04%
11/4/2020	8.56 €	0.80%	2.09%	-5.56%	-1.76%	2.56%	2.21%	1.16	75.19%
11/5/2020	8.54 €	-0.21%	1.59%	0.22%	2.67%	-2.88%	2.21%	-1.30	80.45%
11/6/2020	8.52 €	-0.20%	0.21%	-0.29%	0.10%	-0.30%	2.21%	-0.14	10.75%
11/9/2020	8.89 €	4.29%	2.45%	6.57%	9.69%	-5.40%	2.21%	-2.44	98.44%
11/10/2020	9.06 €	1.96%	-1.19%	4.10%	1.92%	0.04%	2.21%	0.02	1.37%
11/11/2020	8.94 €	-1.35%	1.03%	-1.63%	0.15%	-1.49%	2.21%	-0.67	49.93%
11/12/2020	8.91 €	-0.38%	-0.31%	-1.61%	-1.88%	1.50%	2.21%	0.68	50.16%
11/13/2020	9.00 €	1.00%	-0.02%	1.26%	1.15%	-0.15%	2.21%	-0.07	5.34%
11/16/2020	9.12 €	1.35%	1.62%	0.72%	3.16%	-1.81%	2.21%	-0.82	58.58%
11/17/2020	9.14 €	0.21%	-0.06%	-0.08%	-0.11%	0.32%	2.21%	0.15	11.52%
11/18/2020	9.11 €	-0.32%	0.20%	1.42%	1.63%	-1.95%	2.21%	-0.88	61.99%
11/19/2020	8.99 €	-1.27%	-1.06%	-0.81%	-2.30%	1.02%	2.21%	0.46	35.54%
11/20/2020	8.96 €	-0.34%	0.51%	-0.64%	0.25%	-0.59%	2.21%	-0.27	21.00%
11/23/2020	9.27 €	3.50%	-0.44%	2.65%	1.75%	1.75%	2.21%	0.79	57.08%
11/24/2020	9.62 €	3.76%	1.83%	1.98%	4.62%	-0.86%	2.21%	-0.39	30.15%
11/25/2020	9.50 €	-1.25%	0.08%	0.35%	0.48%	-1.73%	2.21%	-0.78	56.37%

Exhibit 11E**Deutsche Bank AG (GY)**

Actual vs. Predicted Returns

Date	Closing Price	Actual Return	Market Return	Industry Residual	Predicted Return	Company-Specific Return	Standard Error	t-Stat	Confidence Level
11/27/2020	9.48 €	-0.20%	0.58%	-0.79%	0.22%	-0.42%	2.21%	-0.19	14.95%
11/30/2020	9.34 €	-1.49%	-1.02%	-0.76%	-2.19%	0.70%	2.21%	0.32	24.73%
12/1/2020	9.55 €	2.16%	1.45%	0.27%	2.51%	-0.34%	2.21%	-0.15	12.30%
12/2/2020	9.53 €	-0.16%	-0.02%	1.22%	1.12%	-1.27%	2.21%	-0.57	43.39%
12/3/2020	9.75 €	2.32%	0.53%	-0.66%	0.26%	2.06%	2.21%	0.93	64.71%
12/4/2020	9.74 €	-0.09%	0.41%	0.41%	1.04%	-1.13%	2.21%	-0.51	38.90%
12/7/2020	9.57 €	-1.73%	0.05%	-0.70%	-0.51%	-1.22%	2.21%	-0.55	41.89%
12/8/2020	9.46 €	-1.23%	-0.01%	-0.31%	-0.24%	-0.99%	2.21%	-0.45	34.50%
12/9/2020	9.30 €	-1.61%	0.14%	-0.27%	0.01%	-1.62%	2.21%	-0.73	53.38%
12/10/2020	9.11 €	-2.11%	-0.46%	0.06%	-0.60%	-1.51%	2.21%	-0.68	50.31%
12/11/2020	8.82 €	-3.18%	-0.65%	-0.11%	-1.05%	-2.14%	2.21%	-0.96	66.42%
12/14/2020	8.80 €	-0.25%	0.80%	-0.38%	0.92%	-1.17%	2.21%	-0.53	40.20%
12/15/2020	8.92 €	1.41%	-0.01%	0.71%	0.66%	0.75%	2.21%	0.34	26.42%
12/16/2020	8.97 €	0.57%	0.81%	-0.71%	0.65%	-0.08%	2.21%	-0.04	2.82%
12/17/2020	9.10 €	1.42%	0.65%	-0.89%	0.24%	1.17%	2.21%	0.53	40.37%

Exhibit 11F**Deutsche Bank AG (GR)**

Companies Used in the Industry Index

Source: Bloomberg

Number	Company Name	Bloomberg Symbol
1	Bank of America Corp	BAC US Equity
2	Barclays PLC	BCS US Equity
3	BNP Paribas SA	BNP FP Equity
4	Citigroup Inc	C US Equity
5	Credit Suisse Group AG	CS US Equity
6	HSBC Holdings PLC	HSBC US Equity
7	JPMorgan Chase & Co	JPM US Equity
8	Societe Generale SA	GLE FP Equity
9	UBS Group AG	UBS US Equity